Trial Evaluation Protocol

Helping Handwriting Shine

Evaluator: National Foundation for Educational Research

PROJECT TITLE	Helping Handwriting Shine
DEVELOPER	University of Leeds
EVALUATOR	National Foundation for Educational Research
PRINCIPAL INVESTIGATOR	Dr Ben Styles
PROTOCOL AUTHOR(S)	Dr Ben Styles, Gemma Stone, Pippa Lord
TRIAL DESIGN	Experiment 1: A two arm cluster randomised controlled trial with random allocation at school level Experiment 2: A two arm randomised controlled trial with random allocation at pupil level
PUPIL AGE RANGE AND KEY STAGE	Experiment 1: 6 – 7, KS1 (Year 2) Experiment 2: 9 – 10, KS2 (Year 5)
NUMBER OF SCHOOLS	100
NUMBER OF PUPILS	Experiment 1: 3,700 (Based on a mean cohort size of 37 at Year 2) Experiment 2: 370 (Based on 20% of Year 5 from 50 schools) Total: 4,070
PRIMARY OUTCOME	Writing ability (Writing Assessment Measure) – Comparative Judgement
SECONDARY OUTCOME	Writing composition (Writing Assessment Measure) Handwriting speed (Handwriting Speed Test)

Protocol version history

VERSION	DATE	REASON FOR REVISION
1.0	31 July 2018	N/A
1.1	12	Changes for consent level in IPE, payment of incentives, staffing and contents of monitoring logs, data sharing, randomisation stratifiers

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Intervention

TIDieR Framework

Why? *Rationale/theory/goal of the intervention*

This is an efficacy trial of an intervention developed by a team within the School of Psychology at the University of Leeds. The intervention is based on a solid evidence base from health clinics, and on the knowledge that there are large numbers of children in schools who struggle with fine motor skills and consequently have poor handwriting (Preston *et al*, 2017). Approximately 10 per cent of all pupils have such an impairment which 'interferes with their daily living' and is therefore considered a disability in health settings (Diagnostic and Statistical Manual of Mental Disorders, 2013). The prevalence of such problems is higher among pupils who are socio-economically disadvantaged (Liu *et al*, 2015).

The traditional model for supporting such children involves an Educational Psychologist identifying and referring the child to Occupational Health, then using standardised diagnostic criteria to provide a diagnosis in order to allow evidence-based intervention approaches to provide support. But it is increasingly difficult for schools to access Educational Psychology services and the waiting list for referral to Occupational Therapy services can take up to four years in some areas (Dunford and Richards, 2003). Notably, schools are well equipped to help children who struggle with fine motor skills, and stand to benefit from improving a child's handwriting ability. The Helping Handwriting Shine (HHS) programme has codified evidence from a clinical setting, to see how it can be delivered in schools.

Systematic reviews of clinical literature (e.g. Smits-Engelsman et al, 2013; Preston et al, 2017) show that for children with clinical motor deficits such as DCD (Developmental Coordination Disorder), task-oriented approaches are more effective than process-oriented approaches (i.e. the child is taught how to complete a specific task rather than being treated for general 'process' deficit). Physical therapies help – and this is a feature of the intervention (Preston et al, 2017). The Cognitive Orientation to daily Occupational Performance (COOP) approach is another key aspect of the intervention. This encourages a child to overtly identify a task that they want to improve, or an aspect of a task that they are finding difficult, allows the child to try a solution, then reflect, try another solution, then refine, and so on (Smits-Engelsman et al, 2013; Pless & Carlson, 2000). It aims to help children reach a point where their writing is automatic, and thereby not taking up valuable cognitive resources (McCutchen, 1996).

The EEF's literacy guidance reports highlight the importance of ensuring fluent handwriting (EEF, 2016b; 2017). However, there are not currently any commercially available programmes with secure evidence of effectiveness (Evidence4Impact, 2018). Furthermore, handwriting has emerged has a key priority for many schools involved in the EEF's North East Primary Literacy Campaign, so this study will provide valuable information for teachers and school leaders.

The ultimate goal of the intervention is to improve the child's capability to undertake cognitively effortful behaviour (McCutchen, 1996; McCarney et al, 2013). The child will focus on something they find difficult, repeat it and refine it so that they then overcome the motor deficit. The anticipated outcomes for the intervention are first, improvements in legibility and speed;

then fluency (reduced effort); then quality of overall writing composition (due to freed up cognitive capacity). Ultimately the intervention is projected to make improvements in not just writing, but reading and also mathematics, although these are not within the scope for this trial.

Who? *Recipients of the intervention*

All Year 2 pupils within the target regions who attend combined schools with a Year 2 and Year 5 (Leeds, Bradford, Wakefield, Barnsley, Doncaster, Rotherham, Sheffield and the North East (NE)) are eligible to receive the intervention; the trial will recruit around 100 schools with half to be allocated to the intervention and half to control. Intervention schools will then be eligible to select between 5 and 19 children (depending on the number of Year 5 classes and the needs of the school) to receive the intervention.

There are two groups of Y5s eligible to receive the intervention: slow and effortful hand writers; and those that are faster but unable to read their own handwriting. Children whose handwriting is messy but fast/non-effortful and legible are not eligible. Schools will rank and select their pupils according to how much additional support they need, applying these criteria. The criteria will be supplied for schools by the developer and clear guidelines will be developed for schools regarding the selection of pupils. Once the school has supplied their list of eligible pupils, they will be randomised within the school, with half receiving the intervention and half acting as a control group.

The intervention is ideally delivered in a group setting. Schools will be advised to ensure a maximum of four children in an intervention group at Year 5; at Year 2, where small groups are unlikely to be possible, teachers may group pupils together by ability/other within classes to allow differentiation.

What?

Physical or informational materials used in the intervention

A manual is provided to schools which includes information on how the intervention should be implemented, as well as all intervention materials and activities. Schools also receive a resource pack (stickers; playdough etc.) The Leeds team also intend to provide 'gap tasks' and video resources for *ad hoc* use within schools after the completion of the formal intervention.

Procedures, activities and/or processes used in the intervention

Training model: A team comprised of two postdoctoral research fellows (PDRFs) employed by the University of Leeds (with expertise in psychology and physical therapy), two external experts in continuing professional development and specialists in health training from the Bradford Institute of Health Research (an NHS research organisation) will provide the training.

Centre-based training events will be held in October/November 2018, in each of the following geographical areas: Leeds, Sheffield, North East (south) and North East (north). Approximately two full-day (5 - 6 hours) training sessions will run in each location and each participating school will attend one full-day session. A minimum of two members of staff must attend with a maximum of five members in total. Staff can include not just teachers, but Teaching Assistants (TAs), SENCOs, senior leadership or occupational therapists. A

concerted effort will be made to recruit at least one member of senior leadership per school to maximise buy-in. The school must identify staff who can deliver the intervention across Year 2 and in Year 5; it is recommended that staff delivering to Year 5 will not be teachers, but rather other staff (as listed above) that will be able to take the targeted pupils out of class to receive the intervention while 'normal' teaching continues in the classroom with the teacher. Where schools have more than one class per year group, it is likely that the number of staff attending will need to increase. Cascading is not a recognised feature of the intervention, and therefore schools will be encouraged to send to the training all those delivering the intervention, although the team recognises that cascading is likely to happen. The evaluators will capture this through fidelity logs and implementation and process evaluation (IPE) activity monitoring.

Some support will occur in the form of follow-up site visits and/or phone support for 'troubleshooting' (it will be a mixed approach depending on need during the course of the intervention, and beyond). The developer team anticipate 'weekly check-ins' with schools.

Who? *Intervention providers/implementers*

The HHS intervention was developed under the supervision of Professor Mark Mon-Williams, from the School of Psychology at the University of Leeds and Bradford Institute of Health Research. The delivery core team will consist of a coordinator and two PDRFs, all staff currently either working with Professor Mon-Williams on this project (or the 'Born in Bradford' project), or recruited specifically for delivery of the intervention. This team will be based at University of Leeds, and at the Bradford Institute of Health Research.

The National Foundation for Educational Research will recruit schools to the trial in the target areas, with support from the developers.

How? *Mode of delivery*

The intervention consists of a set of materials that must be delivered over eight weeks, in short sessions lasting 30 minutes, three times per week. It can be delivered by any one, or a combination of, trained staff member/s within the school. For Year 2, it is anticipated that whole classes will be taught together, though possibly grouped within the class. For Year 5, it is recommended that pupils who are randomised to receive the intervention (between 2 and 8 per school) will be taught separately, in order to eliminate contamination with the control group.

Where? *Location of the intervention*

The intervention will take place in Bradford, Leeds, Wakefield, Barnsley, Doncaster, Rotherham, Sheffield and the NE region.

When and how much? *Duration and dosage of the intervention*

There is a minimum expectation that the intervention will be delivered over eight weeks, spread across two four-week blocks; one before Christmas 2018 and one after, avoiding the last week before the Christmas holidays and the first week of the new term in January 2019. The three thirty-minute sessions must be delivered separately, on different days of the week. These

requirements are not flexible and the evaluators will use these as the basis for fidelity monitoring.

There will be a 'bedding in' period between the end of the formal intervention and the testing period, during which there is likely to be variability in the extent to which schools revisit the approach; complete 'gap tasks'; and receive additional support from the delivery team. The IPE will monitor activities and variability between schools.

Tailoring? *Adaptation of the intervention*

Some adaptation is acceptable but there are core features, which are identified within the materials, which must be adhered to with fidelity; the training will emphasise these core elements, to ensure that they are adhered to. Class organisation is open to adaptation and some of the activities can also be adapted in order to differentiate for ability - the materials in the manual set this out. The IPE will monitor how the intervention was delivered (for example, whether there were stations around the class at whole class level); how classes were organised; how pupils were taken through the plan; and whether they undertook evaluation and review.

How well (planned)? *What strategies are in place to maximise an effective implementation of the intervention?*

The Leeds team will take responsibility for Quality Assurance of the delivery of the intervention, using regular Keep in Touch days, digital technology to link with schools, online materials, and gap task checks at school level. The evaluator will monitor quality of the intervention delivery through IPE activities.

There is a risk of contamination in Year 5 classes. Although schools will be advised that Year 5 intervention pupils should have their sessions delivered outside of class, there is a risk that these pupils will receive their support as a small group within class. There is also a wider contamination concern, even when intervention pupils are taught separately, that if control pupils are taught by a teacher who has received the intervention training, that teacher may (consciously or unconsciously) pass on some of the techniques to control pupils. This risk should be reduced where the intervention is being delivered by a member of staff other than the class teacher. Other mitigations will be: pupil names will be printed onto their intervention learning materials; and schools will not be given spare copies of the materials.

NFER will provide guidance for the training team on how to advise schools about avoidance of contamination during the training sessions. This will include a 'do's and don'ts' postcard for schools to display in staff areas; and ensuring that there is an understanding of the impact of contamination.

Costs

Intervention schools will be asked to contribute £500 in order to receive the intervention; this is 25 per cent of the actual cost of the intervention. This amount covers staff training sessions, training resources, an intervention handbook, pupil resource booklets, and a resource pack (including stickers, playdough etc.) Intervention schools will make payment at the point of booking on to the training, and this will be dealt with entirely by the University of Leeds.

In addition, intervention schools will be required to cover the costs of:

- supply cover for staff attending training
- travel costs associated with attending training
- teacher time commitments.

A lack of teacher time commitment often causes interventions to falter, but the developers believe that the fundamental nature of teaching handwriting means most teachers have time for it, and therefore that this is less likely to be a problem in this intervention than in some others. The IPE will pay attention to monitor the extent of teacher time commitment.

Control schools will receive £500, paid to them by the University of Leeds after completion of the post tests, and requiring them to have completed all necessary elements of the intervention including provision of pupil data and test data, fidelity monitoring logs, proformas covering what business as usual (BAU) consists of, and anything else required for the evaluation.

Significance

A growing body of evidence, mainly produced within the last twenty years, has shown varying levels of correlation between handwriting automaticity and attainment in writing composition. It has been shown that the ability to produce handwriting automatically improves handwriting speed (Medwell *et al*, 2009), and both the speed and the increased automation itself enable the writer to produce higher-quality writing composition (Medwell *et al* 2009, Kent *et al*, 2016). As children learn to communicate via mark-making during their first years in education, many will encounter physical, psychomotor and sensorimotor barriers that can inhibit the development of handwriting as a skill, which can have wide-ranging consequences on educational attainment (Wallen *et al,* 2013). Furthermore, handwriting forms the basis of several core criteria in both the end of Key Stage 1 and 2 tests, particularly important for schools in today's culture of accountability.

Difficulty with handwriting is, perhaps as a consequence, often reflected upon as one of the most common reasons for referral to occupational therapy (Hoy *et al*, 2011). Approaches to intervention are traditionally widely varied, ranging from therapeutic to cognitive, sensory-based to practice-based and a number of other variables. A systematic review of interventions concluded that 'regardless of treatment type, interventions that did not include handwriting practice and those that included less than 20 practice sessions were ineffective' (Hoy *et al,* 2011). Largely, evidence (Weintraub *et al*, 2009 and Zwicker *et al*, 2009) suggests that interventions with an integrated, practice-based approach are more successful than others.

Age of the student has also been shown to be relevant. In several studies where children aged around 6-7 years are the target population, they are shown to have a more significant correlation between handwriting automaticity and quality of writing composition than children of age 10-11 years, comparatively (Medwell *et al*, 2009, Berninger *et al*, 1998). As Medwell *et al* posit, this 'may indicate that as writers develop, and write more sophisticated texts, there are other issues which account for more of the variance'. As such, core, homogenous class-based intervention is less likely to have a significant impact on older children, whose 'issues' are less likely to be captured and resolved by a one-size-fits-all approach.

Methods

RESEARCH QUESTIONS

Primary Question

RQ1a: What is the impact of the Helping Handwriting Shine intervention on the comparative judgement measurement scale for writing of children aged 6-7 years old?

RQ1b: What is the impact of the Helping Handwriting Shine intervention on the comparative judgement measurement scale for writing of targeted children aged 9-10 years old?

Secondary Questions

RQ2a: What is the impact of the Helping Handwriting Shine intervention on handwriting speed of children aged 6-7 years old?

RQ2b: What is the impact of the Helping Handwriting Shine intervention on handwriting speed of children aged 9-10 years old?

RQ3a: What is the impact of the Helping Handwriting Shine intervention on writing composition of children aged 6-7 years old?

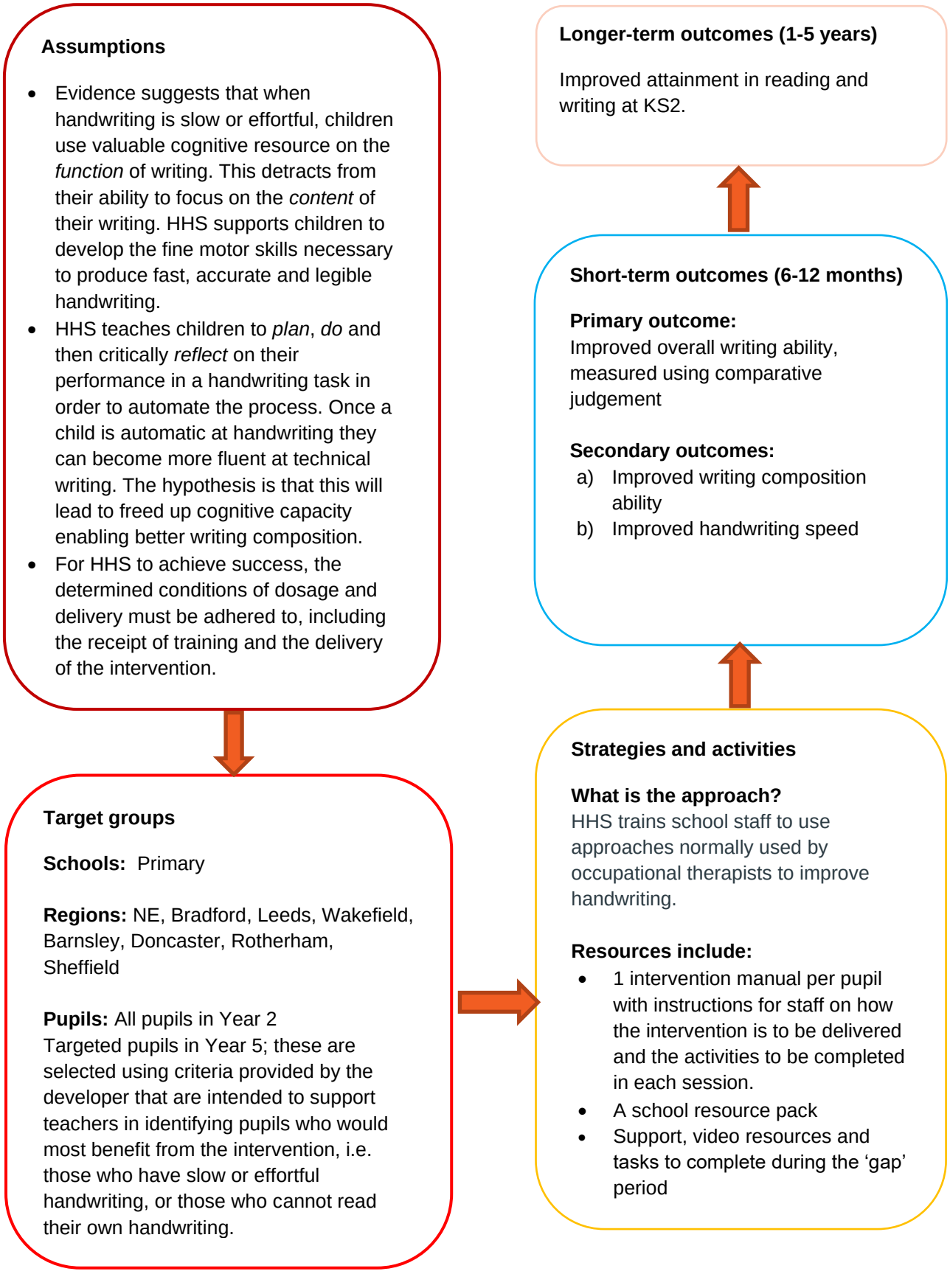
RQ3b: What is the impact of the Helping Handwriting Shine intervention on writing composition of children aged 9-10 years old?

RQ4: Are effects on writing ability (as indexed by RQs above) different for pupils eligible for FSM? If so, how?

RQ5: Is there an interaction between fidelity and attainment for treatment schools?

THEORY OF CHANGE

Figure 1: Helping Handwriting Shine Theory of Change



DESIGN

Trial type and number of arms		Two experiments within one randomised controlled trial, each with two arms.
Unit of randomisation		Experiment 1: School Experiment 2: Pupils
Stratification variables (if applicable)		Experiment 1: Region Experiment 2: School and FSM
Primary outcome	variable	Writing ability
	measure	Writing Assessment Measure (Dunsmuir, Kyriacou, Batuwitage, Hinson, Ingram and O'Sullivan, 2013). Marked using Comparative Judgement
Secondary outcomes	variables	Writing composition Handwriting speed
	measures	Writing Assessment Measure (as above). Marked using criterion referencing Handwriting Speed Test (Wallen, Bonney and Lennox, 2006)

There are two predetermined groups of pupils who are eligible to receive the intervention, as identified by the developer; Year 2 pupils (age 6 – 7 years) and Year 5 pupils (age 9 – 10 years); the intervention is intended to be used with all Year 2 pupils, and with a subsection of Year 5 pupils who meet criteria provided by the developer. The Year 5 pupils must have illegible and/or slow and/or effortful handwriting (not simply 'messy' for behavioural reasons). Given the different nature, selection justification and ability of the two age groups, the effects on Year 2 and Year 5 pupils will be explored in separate experiments:

- Experiment 1 is a two-armed cluster randomised controlled trial targeted at Year 2. The unit of randomisation is the school, which may have more than one Year 2 class. The arms consist of a control arm and a treatment arm.
- Experiment 2 is a two-armed randomised controlled trial targeted to selected Year 5 pupils within all 50 of the schools that have been randomised to receive the treatment in Experiment 1. It was judged to be more convenient for the schools and the evaluation to include only Experiment 1 intervention schools in Experiment 2. This way, schools can send staff on training both for Experiments 1 and 2.

RANDOMISATION

Randomisation for Experiment 1 will be at school level and will take place in July 2018. It will be stratified by the four delivery regions: Leeds, Darlington, Sheffield and Newcastle. This is to avoid clumping of intervention schools that would impede workshop delivery. No further

stratification is necessary due to the large number of schools. Randomisation for Experiment 2 will be at pupil level from all schools allocated to treatment in the randomisation for Experiment 1, and will take place in September 2018. It will be stratified by school and FSM eligibility (the latter obtained directly from the school during pupil data collection for Year 5 only). The randomisation process will be detailed in the Statistical Analysis Plan (SAP) and undertaken by an independent study statistician to ensure that the allocation is concealed. It will be carried out using statistical software with a full syntax audit trail.

PARTICIPANTS

Eligible schools are those within the identified regions, Leeds, Bradford, Wakefield, Sheffield, Doncaster, Rotherham, Barnsley and the North East local authorities, with at least one Year 2 class and one Year 5 class in the academic year 2018/19. NFER will recruit schools to the trial. Schools can come from the maintained sector but not from the private sector. The Education Endowment Foundation have received Expression of Interests from schools in the North East with regards to the North East Literacy Programme, and as such this list of schools will automatically be added to the sample providing they meet the eligibility criteria.

NFER will contact the local authority first to enquire as to any schools which have particular circumstances meaning the LA would recommend they not be invited to participate in the research. Following confirmation from the LA, NFER will write to all schools in the sample, sending a covering letter, School Information Sheet and reply form including the Memorandum of Understanding (MoU). Schools will then return the reply form and MoU to NFER, including the details for a nominated contact within the school, and the number of pupils and classes in the targeted year groups (2 and 5).

NFER will then request Year 2 pupil data from all schools eligible to enter the trial, which the school will then upload via a secure portal. Schools who have provided data will then go forward to baseline testing followed by randomisation. Schools will only be randomised if they have completed baseline tests with their Year 2 cohort. NFER will also provide schools with a letter for parents of Year 2 children, informing them that the school is participating in the intervention and giving them the opportunity to opt out of sharing the child's data.

NFER will undertake Year 2 baseline testing in schools, in June/July 2018. This will consist of two tasks; the Writing Assessment Measure (WAM), administered by teachers and marked using Comparative Judgement by external, blind judges via the No More Marking (NMM) platform; and the Handwriting Speed Test (HST), also administered by teachers, and marked by trained, standardised NFER markers. (For further details of these tests, see the Outcome Measures section below).

NFER will notify schools of the outcome of randomisation in July 2018; if allocated to the intervention group, schools will be asked to provide the details for between 5 and 19 Year 5 pupils who meet the criteria for receiving the intervention, to be uploaded via secure portal. Year 5 pupils will be eligible for the targeted intervention if they have illegible and/or slow and/or effortful handwriting. Class teachers will select and rank pupils according to how much additional handwriting support they are considered to need, applying these eligibility criteria. Pupils will not be eligible if they are capable of producing legible handwriting but fail to do so for behavioural reasons. NFER will provide schools with a letter to parents of participating Year 5 children to let them know the school is participating in the intervention, giving the parent the opportunity to opt out of the trial, including all data sharing. Following receipt of

Year 5 pupil details by NFER, Year 5 pupils will undertake baseline testing in schools in September 2018, consisting of the same tasks as for Year 2. Those that take the tests will be randomised within the school, with half allocated to the intervention group and half to control.

SAMPLE SIZE CALCULATIONS

		Year 2	Year 5	Year 2 everFSM	Year 5 everFSM
MDES		0.18	0.23	0.21	0.23 to 0.41**
Pre-test/ post-test correlations	level 1 (pupil)	0.65	0.65	0.65	0.65
	level 2 (school)	*	*	*	*
Intracluster correlation (ICCs)	level 2 (school)	0.15	0	0.15	0.15
Alpha		0.05	0.05	0.05	0.05
Power		0.8	0.8	0.8	0.8
One-sided or two-sided?		two	two	two	two
Average cluster size		37	-	11	-
Number of schools	intervention	50	-	50	-
	control	50	-	50	-
	total	100	50	100	50
Number of pupils	intervention	1850	185	574	54 to 185**
	control	1850	185	574	54 to 185**
	total	3700	370	1148	108 to 370**

* We have used an estimate of the level 1 correlation for our sample size calculation, followed by inflation by the design effect formula (1 + ICC*(b – 1)) where b is the mean cluster size (Kish, 1965).
** If we assume the probability of an everFSM pupil to be eligible for the trial to be identical to the overall probability of being eligible, our expected number eligibile per school is 2.16. If we assume all eligible pupils are everFSM children then the expected number per school is 7.4 as per the main sample size calculation. The true value will lie somewhere in between.

Without a writing trial pilot using our chosen assessment regime, parameters for sample size calculations must be estimated using comparable studies. The EEF table of intra-cluster correlations, abbreviated to ICCs (Education Endowment Foundation, 2015) suggests a value of 0.109 for Key Stage 1 English in the North East and the pre-testing paper (Education Endowment Foundation, 2013) suggests a correlation of 0.73 between Key Stage 1 and Key Stage 2 English. To remain conservative, we regard these as too low and too high, respectively, as they do not concern the primary outcome of writing composition or the use of Comparative Judgement to assess it. The EEF report archive contains some examples of ICCs obtained from writing measures. The Grammar for Writing evaluation (Torgerson et al., 2014a) had a school-level ICC of 0.26 and the class-level ICC was 0.32. It used a predicted KS2 writing level as the baseline measure but the correlation was low at 0.54. The Calderdale Improving Writing Quality evaluation (Torgerson et al., 2014b) had a school-level ICC of only 0.04 for the extended writing task but this was based on only a sub-group of primary school children who went on to secondary schools within the trial. This trial also used a predicted KS2 writing level as the baseline and the correlation was also low at 0.35. On the basis of

this previous research and to remain realistically conservative we have used values of 0.15 and 0.65 for the ICC and pre-post correlation, respectively. All sample size calculations were carried out using a purpose-built Excel spreadsheet .

What predicted effect size to use was a matter of considerable uncertainty. Methodologically, previous research compares poorly with the scientific method employed by EEF. For example, the most recent meta-analysis of handwriting interventions (Santangelo and Graham, 2016) states that handwriting instruction was associated with an effect size of 0.84 on the quality of student writing. This meta-analysis included non-randomised designs. If we were to embark on a trial using this as our estimated effect size we would not be adding to the evidence base and the trial would have zero padlocks. At the other extreme, due to the increasing accumulation of evidence that EEF trials are underpowered (Sanders and Chonaire, 2015 and Lortie-Forgues, 2017) we might reasonably assume an effect size of 0.15. This is still double the median effect size of EEF trials to date. This results in a trial requiring 140 (70 versus 70) schools. However, an efficacy trial on 140 schools is too costly, and risks diluting the intervention through limited delivery capacity. If we instead assume an effect size of 0.18 for the Year 2 trial this is still well within what is expected from previous meta-analysis of handwriting interventions. We assume 0.23 for the Year 5 trial as this is a small group intervention so we might reasonable expect it to be more effective. These more optimistic effect sizes require 100 schools (50 versus 50) for the Year 2 experiment and 370 Year 5 pupils (185 versus 185) for the Year 5 pupil randomised experiment. The latter will be recruited from the 50 Year 2 intervention schools. These calculations all assume 80% power and alpha=0.05.

In order to predict how many Year 5 students should be eligible in schools of different sizes, we modelled a situation where every Year 5 in the trial sample has an equal chance of being considered for the trial. This can be redone when we know which schools are involved. It yielded the numbers in the following table:

Number of Year 5 classes	Number of eligible Year 5s
1	5
2	9
3	14
4 or more	19

To allow for attrition, a suitable strategy will be to recruit one more than each of the numbers in the above table. This would result in asking schools to put forward around 14% more pupils than we can afford to randomise. Since absence on any given day can be as high as 10% in high FSM areas, this is probably manageable.

Outcome Measures

Primary Outcome

The primary outcome measure, for both Experiment 1 and 2, will be the Writing Assessment Measure (WAM), administered by NFER test administrators and marked using Comparative Judgement by external, blind judges via the NMM platform. Prompt 1 will be used for Year 2 pupils at both baseline and follow-up. This same writing prompt will be given to Year 5 pupils at baseline and follow-up, as this is likely to be an appropriate level of difficulty for a Year 5 pupil who meets the eligibility criteria for the intervention. Pupils will have 20 minutes to complete the exercise. The prompt is formed of three brief sentences, directing the pupil to imagine a specific scenario and write about their response to it.

On completion of the test, scripts will be scanned and uploaded to the NMM platform, where they will be assessed by a pool of current/former teachers, using Comparative Judgment.

Comparative Judgment is a method of producing a rank score against a set of scripts (or other assessment output) without reference to any pre-established criteria or norms. The NMM programme randomly selects pairs of scripts from within each 'task' (either Year 2 baseline; Year 2 follow-up; Year 5 baseline or Year 5 follow-up). Judges are presented with a pair and then asked to choose which one is better, one or the other. To produce results with a high level of reliability, 10 judgements are made per script (known from previous work by NMM to produce a very reliable measure; also see Pollitt 2012).

The NMM platform uses the Bradley-Terry model (see Hunter 2014) to produce;

- Scaled scores; the score of the script calculated from the wins and losses against other scripts; takes into account the scores of the scripts that the script was judged against.
- True Scores; same as the Scaled Score, but with a mean of 0 and a standard deviation of 2.
- True Score SE: the standard error of the True Score.
- Script infit: a measure of consistency between ratings on each script

The scale produced is linear, robust to missing data, has estimates of precision, detects misfit, and the parameters of the objects being measured can be separated from the measurement instrument being used. The platform also provides the following information throughout and after the judging process, which enables monitoring of judges and the iterative completion of a scaled score;

- Judge Infit: A measure of consistency between judges. Judges will be excluded from judging if their 'infit' parameter is greater than 1.2.
- Inter-rater reliability: The correlation between the scale produced by half the judges and the scale produced by the other half. The platform takes four random halves, and reports the mean and standard deviation of the four replications.
- Median Time: the median time a judge took to reach a decision.
- Percentage Left Clicks: the percentage of times a judge chose the left script (average 50% expected)
- Time Chart: a histogram of judging time for each judge.

- Median Time Taken: the median time a judge took to make a decision on a comparison when each script was involved.

The only guidance judges will be given prior to the judging process will be to focus on a *holistic, overall view on writing composition*, in their assertion of 'better'. This assessment does not attempt to separate handwriting and composition, and therefore one element may bias the other. The secondary outcomes are criterion-based and therefore do separate these elements. The primary outcome intends to give a singular, overall, reliable (Pollitt, 2012; Whitehouse & Pollitt, 2012), efficient outcome, and ensures that all participants receive progress scores at the trial's end. Progress scores will be the difference between the means of the control group and the intervention group at baseline and post test. Scripts will be judged in four separate groups; Year 2 pre-test; Year 2 post-test; Year 5 pre-test and Year 5 post-test.

SECONDARY OUTCOMES

Secondary Outcome 1 utilises the script from the WAM prompt, but is instead marked using the WAM marking criteria (see appendix), which focus on content and composition. This will be conducted on a sample of scripts from post-test that have been transcribed to remove the handwriting element and any potential bias this may introduce on marking the content and composition. Baseline for this outcome will use the comparative judgement measure.

The transcribed sample will consist of five randomly selected scripts per school from each Year 2 group, sampled by a statistician; and all Year 5 scripts. Transcription will be completed by trained NFER staff, with 10% quality assured. This will be marked by subject specialist markers from the NFER marking pool who have been trained and standardised to perform the exercise.

Secondary Outcome 2 will be the Handwriting Speed Test (Wallen, Bonney, Lennox, 1996), also administered by NFER test administrators. In this test, a short phrase, specifically designed to include the key handwriting shapes and all letters of the English alphabet, is presented to pupils. Pupils are instructed to copy the phrase out as many times as they can within a three minute time period. This test will be sat immediately after the WAM (primary outcome) at both baseline and post-test; test administrators/teachers will provide instructions adapted from the Handwriting Speed Test manual (page 17), which includes the explanation that pupils will be measured on how 'quickly and neatly' they can write; and 'remember it is not a race, just use your normal writing. Write as quickly but neatly as you can'. The test will be marked by markers from the NFER marking pool using the scoring criteria provided in the Handwriting Speed Test manual. Those scripts that have been transcribed for the Secondary Outcome 1 will have their Handwriting Speed Test marked i.e. five per school for the Year 2 trial and all Year 5 scripts. The remaining Year 2 scripts will not have their Handwriting Speed Test marked. As this is a three-minute activity and therefore not imperative that pupils receive feedback, it was not deemed cost effective to mark all 3,700 Year 2 scripts. The original version of the test is designed to produce raw scores that can be cross-referenced with normative tables; however in this context we will compare pre and post scores without reference to norms.

All markers/judges will be blinded to condition at pre and post-test.

ANALYSIS PLAN

The planned analysis will be presented in detail within a Statistical Analysis Plan (SAP) within three months of Year 2 randomisation. It will follow the latest set of EEF analysis guidelines (EEF, 2018).

The Comparative Judgement algorithm has been tweaked to ensure a robust scale within schools as well as across the whole task - important for the hierarchical structure of the data and in order to provide feedback to the schools. This means there will be slightly more judgements between scripts within schools than between scripts across the entire sample. We will use a Bradley-Terry model (Hunter, 2014) to establish the measurement scale from the Comparative Judgements followed by regression model assumption checks for the main analysis. The Bradley-Terry model is algebraically equivalent to the Rasch model (Rasch, 1960) and results in a linear scale. For both Year 2 and Year 5 outcomes, regression analysis will include baseline writing performance as a covariate along with randomised group. For Year 2, we will use a multi-level regression model (two levels: school and pupil) to account for the hierarchical nature of the data. This model will also contain a dummy variable for region, to reflect the stratified randomisation. For Year 5, the regression will be single level and include both school and everFSM as fixed effects due to the stratified randomisation.

Providing the necessary model assumptions are satisfied, analysis of the first secondary outcome will mimic that of the primary outcome since it is a continuous measure of attainment. Analysis of the handwriting speed test score will need to reflect that it is count data. It may require transformation or the use of a non-standard type of regression. This will be discussed within the SAP.

Effect size calculation at Year 2 will be based on total variance from a multilevel model without covariates. Similarly, at Year 5 it will be based on pooled outcome variance. All effect sizes will be quoted with 95% confidence intervals.

Subgroup analysis will consist of everFSM for the primary outcome only. This will be analysed using a separate model of everFSM children and with an interaction term in the main model, as per EEF guidelines.

Implementation and process evaluation methods

The implementation and process evaluation (IPE) for this trial will cover all aspects of the eight dimensions and implementation factors set out in the EEF IPE introductory handbook (Humphrey et al., 2016). The following research questions capture these dimensions along with areas of particular interest.

RQ1 Is fidelity to the intervention maintained? *What was delivered; extent of adherence to treatment approach; are adaptations made; what is replaced by treatment.*

RQ2 How much does dosage differ across the sample? *i.e. the length of sessions, number of sessions per day and week, and consistency of the approach over the eight-week period. This will be captured at whole-class level for Y2s, and individual pupil-level for Y5s; this will also be used in the on-treatment/CACE analysis.*

RQ3 To what extent do participants (school staff and pupils) engage with the intervention? *Any barriers or implementation challenges, key success factors.*

RQ4 What level and type of support does the Leeds team provide to intervention schools? *Variation between schools; impact on engagement and 'success'.*

RQ5 What does Business as Usual consist of for the control group? *Usual practice for Year 2s; or for Year 5s, as part of any targeted practice that may have already been identified for these pupils.*

IDEA Workshop

The IDEA workshop (6 February 2018) covered the usual aspects of the TIDieR framework and a Theory of Change model for the intervention, which are included above (pages 2-6 and 9, respectively). It was a particularly valuable opportunity to collaboratively review the potential fields for the fidelity and dosage logs to be used by schools in the trial.

Baseline Proforma

Along with pupil data collected at the beginning of the trial, each school recruited to the trial (both intervention and control) will be asked, in June 2018, to complete a baseline pro-forma with details of the planned literacy support activity for their Y2 classes and pre-identified Y5 pupils. This will be completed in June-July 2018 by pupils' current teachers. They will also be asked to provide key names and contact details of the teachers/TAs/SENCOs to be involved in delivery of this activity.

Observations of training workshops

A team comprising three PDRFs from Leeds and Bradford Universities will provide training for intervention schools in October/November 2018. This training will be delivered via a series of full-day sessions in around four centres – Leeds, South Yorkshire, and two in the North East.

Prior to these sessions, in September 2018, we will produce a briefing for the PDRFs, providing them with an information sheet on the trials as a whole and the risk of contamination among Y5 pupils, its potential effects, and how it can be mitigated by teachers. This information will then form part of the training at each training event, along with a Dos and Don'ts checklist, developed by NFER researchers, that staff can pin up in the staffroom/classroom to help manage/avoid possible contamination.

Once the training begins in October 2018, we will observe a selection of the events in order to assess the quality of delivery and the responsiveness of attendees. Our costing is based on the assumption that we will attend four full-day training events, one in each of the centres outlined above. This will enable the research team to gauge whether there are any differences in the responsiveness of attendees, or in the questions raised, by region. We will ask the trainers a small number of post-observation reflection questions after the observed sessions or by email if time does not allow at each session's end.

Fidelity and Dosage Logs

Between November 2018 and February 2019, the key staff members delivering HHS in each intervention school will be asked to complete an Excel log each week for their Y2 class(es) (at class level) and their Y5 intervention pupils (at pupil level). The Y2 Excel sheets will record number of sessions, session dates, session length, notes about approach and content, and a rating of class engagement; plus an additional "overall reflections" tab, where the teacher/TA/SENCO can comment on issues such as adaptations made and challenges faced. There will also be a tab for the collection of cost data. The log will have drop-down selections for easy, quick completion. The Y5 excel sheets will be similar, but prepopulated with Y5 pupil details, to be recorded at an individual pupil level. Each teacher/TA/SENCO (one or more Year 2 teachers and one or more Year 5 teachers; essentially, one log for each taught group) will be able to download their Excel log from a secure portal, and upload it after Week 2 (to help us check accuracy and offer support with completion if needed), and again at the end of the eight week intervention period.

NFER's Research Operations Department will administer the logs and will support schools to complete them. The data will then be transferred (via secure portal) to the research team for analysis.

To understand any further literacy support in intervention schools beyond the eight-week period, schools will complete a further log requiring staff to indicate how much support they have received from the developer during the intervention and in the period between the end of the intervention and the outcome testing, and the extent to which the HHS programme has been embedded, in the time since the end of the eight week intervention period.

Business as Usual Logs for Control Schools

In February 2019, one member of Year 2 staff in control schools, and one member of Year 5 staff in intervention schools (who has not been delivering the Year 5 intervention), will be asked to complete a one-off log about the literacy support given to Y2 class(es) in control schools, and to the Y5 control pupils in intervention schools, during the eight-week period. It will include question/s around comparison group activities and dosage of literacy teaching,

and look to identify any potential contamination between intervention and control Year 5 pupils.

Qualitative work (observations, case studies and telephone interviews)

In addition to collecting information through proformas and logs, we will conduct a series of qualitative observations, case-study visits and telephone interviews in order to explore the following aspects of the implementation factors set out in the IPE guidance in greater depth, particularly:

- Preplanning and foundations: what is the level of need, readiness and capacity for developing handwriting in the recruited schools? What criteria are used to identify the Y5s for this support?
- Implementation support system: what training and support is available from the University of Leeds delivery team, and how is it perceived?
- Implementation environment: what is the context in the HHS schools, e.g. how does it fit/differ from the school's usual literacy strategy/practice including any NE literacy activity, senior leader support; any barriers to delivery?
- Implementer factors: who delivers the handwriting intervention – teachers, TAs, SENCOs? What's their level of qualification and years of experience? (this information will also be collected on the Week 8 reflection tab in the fidelity/dosage log)
- Intervention characteristics that can affect implementation – the key criteria agreed for fidelity regarding dosage, weekly pattern, permissible tailoring, who implements, and any aspects of the programme or materials recently revised.

We will undertake qualitative work in a sample of 12 intervention schools, which will be selected randomly based on achieving a broad geographical spread. Six of these schools will be case-study schools, and six will be invited to take part in lighter-touch telephone interviews.

The six case-study schools will be visited during the course of the intervention (between November 2018 and February 2019). Each visit will comprise:

- One observation of an HHS delivery session, split evenly between Year 2 and Year 5 across the sample, to record the extent to which the intervention is delivered with fidelity, and any key adaptations made. We will ask delivery staff a small number of post-observation reflection questions after the observed sessions or by email if time does not allow at each session's end.
- Two paired discussions with pupils involved in HHS (one pair of Y2 pupils and one pair of Y5 pupils). The rationale for talking to pupils is that the HHS logic model includes outcomes related to pupil confidence and motivation for writing, which are not explored elsewhere in the evaluation. We have a number of tried and tested approaches to talking with young (especially Y2) pupils, which include using prompts and flashcards to help the children articulate their views.
- Two interviews with the members of staff who are responsible for Y2 and Y5 delivery, respectively, to explore their views of the quality of training received, the intervention, ways in which they are using the materials and organising their classes, any changes they have made to the recommended approach, and why, and their views of the impact of the intervention on pupils. The Y5 interview will include

question/s about potential contamination between control and intervention pupils and how this has been mitigated, identified and dealt with (where applicable)

- An interview with the school's Literacy Co-ordinator, to explore views of the impact of the intervention, any impact on the school's overall strategy for handwriting, impact on staff in terms of time, workload and motivation, and any issues around contamination between control and intervention at Year 5.

In May 2019 we will conduct telephone interviews with two members of staff in each of the remaining six schools covering the same range of topics as outlined above. Selected staff will be those who delivered or supported the intervention at either Year 2 or Year 5.

In June 2019, we will conduct up to five telephone interviews with members of the development team to explore: perceptions of the effectiveness of the training, intervention and follow-up support; perceptions of school or regional differences; challenges encountered, and how these were overcome.

Cost evaluation

The cost of programme delivery will be explored from the school's and developer's perspectives. Information will be collected about the cost of the intervention as it was delivered in the evaluation, and about what it would cost a school to self-fund the entire costs of delivering HHS. As the programme is partially funded for intervention schools by the EEF and the University of Leeds, further cost information will be sought from them if needed. Costs will then be calculated as a cost per pupil from the school's perspective, as if schools were paying for the intervention, based on marginal financial costs. We do not propose to collect Business as Usual (BaU) cost data from control schools, as this may be unnecessarily costly for an efficacy trial. However, we will collect BaU costs for any literacy support provided to Y5 control pupils in intervention schools, to illustrate how the HHS intervention compares to spend on other pupils.

Questions will be administered in the logs, during the case-study visits and telephone interviews mentioned above, and during the telephone interviews with the development team. We will explore direct, marginal costs including: training costs, staff salary costs if over and above the hours of current staff; purchasing costs for resources, meals, subsistence, travel and any out of hours room hire.

We will also report 'time' in terms of the amount of hours spent by staff and any other volunteers; and any re-allocation of existing resources (e.g. allocation of a named contact for the programme). We will report pre-requisite costs, which may include writing resources which a school may already have.

HSS will be considered within the wider context of the costs of other literacy support programmes; taking into account existing costing methods and published costs (Curtis, 2013). Costs per pupil will be estimated in terms of the overarching experiment i.e. what is the cost per randomised pupil regardless of their having received the intervention or not. Costs will also be estimated per school year, and then over multiple years (up to three years) to show how costs might reduce slightly where a school takes up the intervention on a

frequent basis. All this will be done as per the EEF guidelines on measuring cost effectiveness (Education Endowment Foundation, 2016).

Ethics and registration

The trial will be designed, conducted and reported to CONSORT standards (http://www.consort-statement.org/consort.statement/) and registered on http://www.controlled-trials.com/. The evaluation will be conducted in accordance with NFER's Code of Practice, available at: http://www.nfer.ac.uk/nfer/about-nfer/code-of-practice/nfercop.pdf. NFER, the University of Leeds, EEF and No More Marking will work together to ensure each organisations' policies can be applied in practice.

ETHICAL AGREEMENT

Ethical agreement for participation within the trials will be provided by the headteacher of the school. Parents will be provided with full details about the intervention, and will be given the opportunity to withdraw their child from data processing if they have objections to this.

All data gathered during the trial will be held in accordance with the Data Protection Act (1998), and from May 2018 with the General Data Protection Regulation (2018), and will be treated in the strictest confidence by the NFER, EEF, No More Marking and the University of Leeds. Pupil data collected from schools by NFER will not be made available to anyone outside of those parties listed. Our legal basis for gathering and using this data is legitimate interest, through our work as a research organisation.

Data protection

The legal basis for processing the personal data accessed and generated by the trial is covered by GDPR Article 6 (1) (f) which states that;

> 'processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third party except where such interest are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of the personal data'.

We have carried out a legitimate interest assessment which demonstrates that the evaluation fulfils one of NFER's core purposes (undertaking research, evaluation and information activities) and is therefore in our legitimate interest, that processing personal information is necessary for the administration of the randomised controlled trial. We have considered and balanced any potential impact on the data subjects' rights and find that our activities will not do the data subjects any unwarranted harm.

In setting out the roles and responsibilities for this trial, the four parties (NFER, the University of Leeds, No More Marking and EEF) have signed a Data Sharing Agreement. This includes a description of the nature of the data being collected and how it will be shared, stored, protected and reported by each party. In addition, NFER will provide a memorandum of

understanding to schools, explaining the nature of the data being requested of schools, families and children, how it will be collected, and how it will be passed to and shared with NFER.

For the purpose of research, UPN and trial test data for all pupils in the trial will be linked with information about pupils from the National Pupil Database (held by the Department for Education (DfE)) and shared withEEF's data archive contractor FFT Education, and, potentially, in an anonymised form to the UK Data Archive. Pupil data will be treated with the strictest confidence. Neither we, nor any of the named parties, will use pupil names or the name of any school in any report arising from the research.

On conclusion of the project, the Fischer Family Trust (see http://www.fft.org.uk/) will collate and de-identify the data for upload to the EEF data archive. The archived data will be available in a de-identified form with restricted access for research purposes only. NFER handles personal data in accordance with the rights given to individuals under data protection legislation. Individual rights are respected.

For further information, please see the Privacy Notice for the Evaluation of Helping Handwriting Shine, available at https://www.nfer.ac.uk/pdf/EEFH_Privacy_Statement.pdf

Personnel

Name	Institute	Roles and responsibilities
Dr Ben Styles (BS)	NFER	Trial Director, responsible for leading the NFER team and project delivery.
Gemma Stone (GS)	NFER	Trial manager, responsible for overseeing the day to day running of the trial and for managing the process evaluation activities and analysis
Kerry Martin (KM)	NFER	Process evaluation researcher, responsible for carrying out process evaluation activities and analysis
Kathryn Hurd (KH)	NFER	Test and Schools administration lead, responsible for overseeing recruitment, school contact and testing
Dr Frances Brill (FB)	NFER	Assessment advisor, responsible for guiding the team on selection and marking of appropriate assessments
Dr Joana Andrade (JA)	NFER	Statistician, responsible for statistical analysis
Dr Chris Wheadon (CW)	No More Marking	Will supply the Comparative Judgement platform and advise on interpreting and modelling the resulting data
Prof. Mark Mon-Williams (MMW)	University of Leeds	Lead developer, responsible for delivery of the intervention

Risks

Risk	Likelihood/ impact	Mitigation
Insufficient schools/pupils recruited to the study	Low/High	Recruitment will rely on the local knowledge of the developer team and the NE literacy campaign. Developers and funders agree that handwriting is a core issue for primaries and the intervention is more likely to attract a full sample than other trials.
Possibility of attrition pre and post randomisation	Medium/High	An additional 10% of the sample will be recruited (both at Year 2 and Year 5) to allow for a moderate amount of attrition. Engagement, contact and support from delivery team will be high. MoU will clearly outline responsibilities and randomisation process.
Lack of response from schools at post/follow-up	Medium/High	A £500 incentive will be available to control schools who complete post testing and follow-up. Engagement, contact and support from delivery team will be maintained after the intervention and until follow-up completed. MoU will clearly outline responsibilities of schools.
Researcher loss	Medium/Medium	NFER has a large research department with numerous researchers experienced in evaluation who could be redeployed.
Incomplete data returned by schools	Medium/Medium	MoU sets out clearly what is expected in terms of data collection at each time point. NFER will use reminding strategies to support schools to provide data. Developer will support NFER with encouraging schools to complete and return data.
Contamination within control pupils in Y5	High/High	NFER will brief the trainers on risks and effects of contamination, providing a presentation for them to deliver at each training event. NFER will provide a Dos and Don'ts display card for classrooms/staffrooms. NFER/developers recommend that a staff member other than the main Y5 teacher is trained/delivers the intervention. Activities with the control group within each school will be monitored via logs and through the IPE.

Timeline

Dates	Activity	Staff responsible/ leading
Jan – March 18	• Setup meetings, IDEA workshop, TIDieR and Theory of change developed • Protocol developed • Contracts and agreements setup	GS
March – May 18	• School recruitment	KH, GS
June – July 18	• Baseline proforma for all schools • Baseline testing for Year 2 pupils	GS KH, GS
July 18	• Randomisation of Year 2 schools • Schools informed of randomisation result • Intervention schools provide list of eligible Year 5 pupils	KH, GS
Sep 18	• Baseline testing for eligible Year 5 pupils • Year 5 pupils randomised within schools • NFER briefs trainers on contamination risks and mitigations	KH, GS GS
Oct - Nov 18	• Intervention schools book training sessions • Schools attend training sessions • NFER observes training sessions • NFER review training and intervention materials	MMW MMW KM, GS KM, GS
Nov 18 – Feb 19	• Intervention schools deliver the intervention • Control schools continue with Business as Usual • All intervention schools complete weekly fidelity and dosage logs • All control schools, or schools with control pupils, complete one-off BaU log (Feb 19) • Case-study visits in six schools	MMW MMW MMW GS KM, GS
Mar 19 – June 19	• Intervention schools embed the approach, complete gap tasks, with continued support from delivery team where needed • Control schools continue Business as Usual • Telephone interviews with twelve schools (May 19)	MMW MMW KM, GS
June – July 19	• Follow-up testing for Year 2 and Year 5 pupils • Telephone interviews with developer team	KH, GS GS
Aug 19	Data analysis	GS, KM, JA
Sep – Dec 19	Drafting and finalising report	GS, BS

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Appendices

Appendix A

Writing Assessment Measure marking scheme (Dunsmuir, Kyriacou, Batuwitage, Hinson, Ingram and O'Sullivan, 2013).

Writing Assessment Measure (WAM)

TIME GUIDELINE: *Prompt 1:* 15 minutes *Prompt 2:* 15 minutes
DISCONTINUE RULE: Stop the child after 15 minutes of writing

Elements and Criteria	Circle Score
Handwriting	
• Writing is consistent, fluent and cursive.	4
• Clear, neat and legible and may show evidence of joining handwriting	3
• Handwriting may vary in shape and size and is beginning to develop consistency.	2
• Handwriting is indecipherable or difficult to read.	1
Spelling	
• Evidence of correct spelling of complex words containing prefixes/suffixes or irregular words e.g. souvenir, destruction, and conscious.	4
Attempts to spell some complex or polysyllabic words using visual or phonetic strategies, e.g 'safariye' for safari, 'adventerous' for adventurous.	3
• Spells the majority of high frequency common words correctly e.g. inside, because, while.	
• Spells some common monosyllabic words correctly (e.g. mum, cat, bird). Uses phonic strategies to attempt to spell high frequency common words e.g. 'grat' for great, 'fhun' for fun.	2 1
Punctuation	
• Uses a range of punctuation to clarify structure and create effect (e.g. speech marks, dashes, brackets, apostrophes, commas to demarcate sentences).	4
• Secure use of full stops and capital letters. Uses punctuation in addition to capital letters and full stops, the majority are used correctly (e.g. question marks, exclamations marks, commas in lists).	3
• Evidence of accurate use of capital letters and full stops, however few there are. (e.g. Sentence finishes with a full stop and next sentence begins with a capital letter)	2
• Shows awareness of how full stops are used in writing.	1
Sentence Structure and Grammar	
• Secure control of complex sentences. Understands how clauses can be manipulated for effect. Able to use conditional and passive voice (e.g. having watched him eat a dog biscuit, she felt sick)	4
• Beginning to write extended sentences including subordinators (e.g. if, so, while, when, after). The basic grammatical structure of sentences usually correct (e.g. usually consistent and correct use of tenses and nouns and verbs agree).	3
• Beginning to use other conjunctions to create compound sentences (e.g. because, but, so, then) and may be using multiple clauses (still mixing up tenses).	2
• Writes simple sentences which include the conjunction 'and'.	1
Vocabulary	
• Demonstrates use of well-chosen vivid & powerful vocabulary to create effect (e.g. verbs, adjectives, adverbs)	4
• Varied use of adjectives, verbs and specific nouns (e.g. delicious for nice/sauntered for went/poodle for dog)	3
• Some selection of interesting and varied verbs e.g. jumped, compare, guess	2
• Uses simple vocabulary, appropriate to content. Writing is composed of simple nouns and verbs e.g. look, went, go, play, see	1
Organisation and Overall Structure	
• Paragraphs are well organised, based on themes and provides a cohesive text for the reader (e.g. paragraphs, subheadings, logically organised events).	4
• Uses paragraphs to organise writing, showing an identifiable structure. May be short sections.	3
• Themes are expanded upon and linked together in a series of sentences.	2
• Communicates meaning but may 'flit' from idea to idea and any themes that are expanded are done so in one sentence.	1
Ideas	
• Ideas are creative and interesting in a way that engages the reader. Uses a range of strategies and techniques such as asides, comment, observation, anticipation, suspense, tension.	4
• Ideas are imaginative and varied evidence of descriptive detail about characters, settings, feelings, emotions & actions.	3
• Ideas are developed to by adding detail (e.g. is beginning to provide additional information or description beyond a simple list).	2
• Produces short sections of ideas which may be repetitive and limited in nature.	1
Total score	