

Effectiveness trial of Switch on Reading

• Evaluation Summary	
Age range	Year 3 pupils
Number of schools	188
Design	Randomised control trial, randomised at the school level (effectiveness)
Primary Outcome	Reading

1 Intervention and Significance

Switch-on, an intensive ten-week literacy intervention, was developed by Nottinghamshire Reading Recovery Teacher Leaders in response to requests from headteachers to provide Teaching Assistants (TAs) with professional development in relation to literacy. The needs identified for improved support and training for TAs in Nottinghamshire reflect findings in a wider review of evidence on ‘Making the Best Use of Teaching Assistants’ which found that ‘the typical deployment and use of TAs, under everyday conditions, is not leading to improvements in academic outcomes’¹. Switch-on is aimed at children who are not demonstrating age-expected levels at primary school. It is a personalised intervention that is tailored to the needs of individual pupils. It is delivered by specially trained TAs in daily 20-minute sessions over a ten-week period. The aim of the intervention is that ‘children are able to participate more fully in the classroom by becoming more confident, active and independent readers, who can use a range of effective reading strategies in order to achieve their full reading potential’ (Nottinghamshire County Council Switch-on training manual).

An efficacy trial of the Reading element of the full Switch-on programme with Year 7 pupils who had not reached a secure level 4 at the end of Key Stage 2 found that the programme ‘made a positive noticeable impact’. The findings suggested that on average pupils receiving the intervention would make approximately three additional months’ progress over the course of a year compared with pupils who did not receive the intervention. In particular, the intervention was shown to have a positive impact on literacy learning of pupils with special educational needs (SEN), those in receipt of pupil premium and lower attainers² (Gorard et. al, 2014).

The current effectiveness trial will test the findings from the efficacy trial on a larger sample of schools with a cascaded approach of training the trainer, which more accurately reflects the conditions that would be required for a larger scale up. The quantitative impact evaluation will assess whether Switch-on still has a positive impact when the developers are no longer involved in direct delivery of the

¹ Sharples, J, Webster, R and Blatchford, P. (2015). Making the Best Use of Teaching Assistants- Guidance Report. London: Education Endowment Foundation.
https://educationendowmentfoundation.org.uk/uploads/pdf/TA_Guidance_Report_Interactive.pdf

² Gorard, S, Huat See, B, Siddiqui, N. (2014). Switch-on Reading Evaluation Report and Executive Summary. London: Education Endowment Foundation

programme and the process evaluation will identify the challenges and enablers to roll-out of the programme.

While the efficacy trial included pupils in Year 7, the proposed effectiveness trial will include pupils in Year 3, aged 7 and 8 years, who are working below age related expectations at the end of Key Stage 1. The inclusion of younger pupils in the trial is aligned to EEF’s focus on generating evidence about effective early intervention and prevention strategies. The intervention is designed for pupils of any age who are not meeting age-related expectations and so is suitable for Year 3 pupils. Two versions of the Switch-on intervention will be tested, Switch-on Reading (the version tested in the previous EEF efficacy trial) and Switch-on Reading and Writing (the full programme that is usually delivered in schools). The additional Switch-on Reading and Writing arm has been included to test whether the full programme achieves different outcomes to Switch-on Reading.

NatCen, as the independent evaluator, will be responsible for randomisation of pupils, pupil assessment, providing the developers and trainers with information about the requirements of the evaluation, engaging schools in the evaluation and independent analysis for the EEF report.

2 Methods – Impact Evaluation

2.1 Research questions

The trial is an effectiveness trial, focused on determining how the intervention performs in the circumstances in which schools would normally be implementing it (i.e. at scale).

Figure 1: Groups involved in impact evaluation

	Switch-on Reading and Writing schools	Switch-on Reading schools	Control group schools
Eligible and selected	A1	A2	A3
Eligible but not selected	B1	B2	B3
Not eligible	C1	C2	C3

There are three principal research questions to be answered by the project:

1. What is the impact of Switch-on Reading and Switch-on Reading and Writing on reading outcomes for eligible Year 3 children (comparing A1 and A2 with A3)?
2. Does Switch on Reading and Writing achieve better outcomes than Switch on Reading (comparing A1 with A2)?
3. Are there (positive or negative) spill-over effects on non-participating children that have reading difficulties, or on non-participating children (comparing B1 and B2 with B3, and combined B1, C1, B2 and C2 with combined B3 and C3)?

In addition to the impact evaluation, the study includes a process evaluation. The research questions to be answered by the process evaluation are set out in Section 3 below.

2.2 Design

The impact evaluation will be designed as a three arm (two treatment groups and a control group) school-level randomised control trial. Schools have been chosen as the unit of treatment and randomisation because our aim is to test the effectiveness of the intervention in real life circumstances. In these circumstances, schools' choices and cultural and environmental factors will have a great impact on the extent to which an intervention can achieve its optimal outcome.

188 schools from around England³ are expected to participate in the trial. They will be randomly assigned to one of three intervention states:

- Control group ('business as usual')
- Intervention group (Switch-on Reading)
- Intervention group (Switch-on Reading and Writing)

In developing this protocol, NatCen and EEF considered the relative merits of different control conditions. We considered stipulating a 'matched time condition' for the control arm, which would require control schools to provide loosely structured one-to-one time between TAs and pupils for the same period of time as Switch-on (i.e. daily 20-minute sessions). We also considered stipulating a specific intervention, such as a phonics intervention, for this matched time. However, we decided that business as usual will likely involve many intervention elements to help struggling pupils, and that the question, 'what is the effect of Switch-on on attainment relative to what schools are currently doing' is the most interesting and relevant question for an effectiveness trial. As a consequence, a business as usual control will be used.

The evaluation design allows schools to select the TAs and pupils that will participate in the intervention. The advantages of this type of school-led approach are that the school can direct the intervention to pupils they think will benefit most and also maintain control over how resources are deployed in the school. This will help to maximise outcomes and also reflects real-life working practices in schools. As a consequence, the evaluation will measure the average effect of the treatment on outcomes of pupils believed by schools to be most likely to benefit.

The fact that schools are able to select pupils that participate in the trial may mean that they are more likely to provide support and interventions even if they are allocated to the control group. NatCen will monitor closely the range of interventions being delivered in control schools as part of the process evaluation. This information will be collected through an online survey at the end of the intervention period.

The use of a 'business as usual control' means that pupils in the control group are not worse off than those in the treatment group as they will also be receiving interventions to support them. As a consequence, there are no ethical reasons why pupils in the control group should be offered the intervention as part of a wait list approach.

³ Local authorities participating in the trial are: The participating local authorities are: Birmingham, Bristol, Buckinghamshire, Cambridgeshire, Cheshire, Coventry, Derbyshire, Northamptonshire, Kent and Medway, Lincolnshire, Stoke on Trent, Sandwell, Walsall, Warrington, Wiltshire and Yorkshire.

We have nonetheless opted to use a wait list approach in the trial as a means to encourage schools to participate in the trial. In practice this means that schools allocated to the control arm will be offered the opportunity by local trainers to participate in Switch-on in the 2016/2017 school year, with the next cohort. It is also expected that the use of a wait list will reduce and help manage the risk of 'resentful demoralisation' and 'compensatory rivalry'. NatCen will not collect or analyse data from control schools in this period; our involvement in the trial will come to an end after sign off of the final report (draft to be submitted Autumn 2016).

2.3 Randomisation

The three groups (business as usual control, Switch-on Reading and Switch-on Writing) will be roughly equal in size, with either 62 or 63 schools in each. The random allocation will be stratified by trainer, in order to ensure that each trainer is allocated a predictable number of treatment schools. No other covariates will be taken into account. The randomisation will be carried out by an independent analyst within the evaluation team.

2.4 Participants

Recruitment of schools will start in the latter part of the summer 2014/2015 term and continue until mid-September 2015. Schools will be recruited to take part in the trial by 22 local trainers delivering the training to TAs. Any state-maintained, academy or private primary school located in one of the 17 participating local authorities where there is not already whole school implementation of Reading Recovery (i.e all teachers and TAs have been trained in and practice Reading Recovery principles) is eligible to participate. In addition to the waitlist, schools allocated to the two treatment arms of the trial will be offered subsidised training, materials and guidance and support as an additional incentive to sign up to the trial. Those allocated to the control arm will be offered financial compensation in the spring term 2016.

When a school has agreed to participate in the trial, the headteacher is required to sign a Memorandum of Understanding. This is a document that sets out the roles and responsibilities of the school, the evaluators and the Switch-on delivery team. By signing the Memorandum of Understanding, the school commits to fulfilling the requirements of the evaluation and to remain in the trial for its duration.

Schools will only be entered in to the randomisation process if they have completed a pre-randomisation survey and submitted all of the required data. Shortly after they have been recruited to the trial, schools will be sent a link to an online questionnaire that will ask for information on:

- how TAs are trained and deployed in the school, such as is there a standard induction for TAs, is there time in the timetable for TAs and teachers to plan lessons or part of lessons together in advance?
- Year 3 pupils, such as their name, Unique Pupil Number (UPN), date of birth and reading level
- pupils selected to receive Switch-on and information on why they were selected
- the TAs, including the qualifications, experience levels in years, and which TAs will be working with which pupils
- rooms and equipment available for testing and the dates of the summer term to plan the testing schedule
- Data on disability and SEN status in an anonymised, aggregate format.

Information collected in this survey will be used in both the impact and process evaluation for a range of purposes. In the impact evaluation, information will be used for:

- printing individualised labels for paper-based tests to prevent errors in completion which could invalidate the data;
- using the UPN to access National Pupil Database (NPD records); and
- using information on why pupils were selected to compare the control and treatment schools to ensure there are no major differences.

An individual access code will be provided to each school. This will allow schools to complete the form in stages in necessary, saving as they go along, and also for different individuals in the school to complete sections of the form. This should help to maximise the response rate. Obtaining accurate and comprehensive information from schools in the pre-randomisation survey is crucial to the success of the evaluation; it lays the foundation for the study. We have therefore allocated a dedicated team member to liaise with schools to answer questions about the information required, to check that submissions are complete and accurate and to follow up with schools who have not provided information.

Each school will designate between two and four TAs to be trained and to deliver Switch-on. A minimum of two TAs per school has been stipulated to ensure TAs have peer support and are not working in isolation. To be eligible, TAs must not have received previous training in Switch-on but there are no additional eligibility criteria. The TAs will receive training from the local trainers in the delivery of Switch-on and ongoing guidance, support and monitoring. The two Switch-on developers will have no direct contact with schools.

For each TA, schools will select between two and four pupils to receive the intervention (i.e between four and 16 pupils per school). Pupils will be eligible for the intervention if they are not achieving age-related expectations in literacy at the end of Key Stage 1 (based on teacher assessments carried out at the end of Year 2) and if they do not have a high level of special needs. Schools are advised to only select pupils for who they believe the intervention will be appropriate.

If there are more eligible pupils than places available, schools can select which pupils to include. Selection takes place in September-October 2015, before randomisation, and cannot be changed post-assignment. Schools also identify the delivering TAs before randomisation.

Schools have the option to select up to three reserve pupils in case any of the selected pupils leave the school before the delivery of treatment takes place in January 2016. In schools where all eligible pupils are selected to take part, selection of reserves is not possible.

2.5 Sample size calculations

The sample size calculations are focused on the main hypothesis, comparing Switch-on (either Reading only or Reading and Writing) to the control group. Minimum detectable effect sizes (MDES), expressed in standard deviations, are displayed in Table 1. The calculations assumed a power of 80%, a statistical significance level of 5% for a one-sided test, and an intra-class correlation coefficient (ICC) of 0.15.

While pupils designated to take part in the intervention are not randomly selected within schools, the fact that schools' resource constraints limit the number of pupils involved, the intervention can be seen as being delivered to the entire population of eligible treatable pupils. As such, the sample size calculations use a cluster-randomisation approach to calculating MDES, in which 100% of the population

in each cluster is part of the intervention. While the number of pupils designated for treatment per school can be between four and sixteen, we have assumed an average, across schools, of nine pupils.

The proportion of variance explained can be high for educational interventions if pre-test scores are used⁴.

Table 1: Minimum detectable effect sizes

	Number of recruited schools (Switch-on : Control)		
	100:50	110:65	130:70
Unadjusted	0.21	0.20	0.19
.20*	0.20	0.19	0.18
.40*	0.20	0.18	0.17
.60*	0.19	0.17	0.16
* proportion of residual variance explained by covariates			
Assumes 80% power, statistical significance level 5%, ICC 0.15			

2.6 Outcome Measures

EEF’s standard guidelines on testing procedures for evaluation of RCTs recommends the use of National Pupil Database records of key stage attainment as a pre-test score where high correlations are observed between key stage scores and tests.⁵ Therefore, pupil KS1 scores obtained from the NPD will be used as the pre-intervention scores. NatCen will be responsible for applying for the NPD records in early 2016. Post-intervention assessments will be carried out in the summer 2016 term using the Hodder Group Reading Test (HGRT) II 2A.

The test is appropriate for pupils in Years 2-6 (aged 7-12), is paper-based, standardised, correlated to the National Curriculum and has good reliability attributes. It tests pupils’ reading comprehension at word, sentence and continuous text level and is suitable for use with mixed ability groups.

2.6.1 The process for post-tests

The testing process will be overseen by independent NatCen evaluators who will not be aware of whether the schools in which they invigilate are in the control or treatment arm. The tests will be scored by an independent agency. They will not have any information on the treatment or control status of schools.

We will work closely with schools to ensure the testing of all Year 3 pupils takes place over a two-week window at the start of the summer term 2016. We will:

- **Ensure that the MoU includes a clear statement about the testing** so that schools understand that facilitating testing is a prerequisite to participation in the trial.
- **Arrange a telephone call with each school to schedule the testing.** The aim of this call will be to check venues for testing and to agree one or more dates and times for each testing session which fits around the school’s timetable and ensures that all pupils are tested during the two week testing

⁴ Bloom, Howard S., Lashawn Richburg-Hayes, and Alison Rebeck Black. 2007. ‘Using Covariates to Improve Precision for Studies That Randomize Schools to Evaluate Educational Interventions’. *Educational Evaluation and Policy Analysis* 29 (1): 30–59.

⁵ http://educationendowmentfoundation.org.uk/uploads/pdf/Pre-testing_paper.pdf [Accessed 21-02-14]

window. We have found in previous studies that this approach is effective in securing the cooperation of schools and planning for testing.

- **Work closely with schools to answer any questions they have about testing.** With 188 schools participating in the trial, we expect to have to field a high volume of telephone calls and email enquiries. We have allocated a team member to be responsible for this. Having a single point of contact for schools is in our experience the most efficient approach as it ensures schools are clear on who they need to ask for help and allows a good working relationship to be built.
- **Allocate time and resource for ‘mop up testing’.** If pupils are absent when the test takes place, they will be tested as soon after their return as possible.

The tests would be administered by a NatCen invigilator who is blinded to which group the pupils are in. Children will be tested, ideally as whole class, at their school. Schools will not be informed in advance by NatCen which test is to be used.

An independent agency that scans and codes test papers will be used. This agency will not know which schools are in treatment and control arms of the trial.

2.7 Analysis

Outcomes will be assessed using an intention-to-treat approach. This means that reserves can only be substituted until the end of December 2015; no changes can be made to participating pupils after the intervention period begins in January 2016. To inform analysis, the evaluation will collect pupil attendance data from schools in the treatment arms. It will be the responsibility of the 22 Switch-on trainers to collect this information from schools and upload to a secure File Transfer Protocol (FTP) site for the evaluators. The evaluators will provide clear guidance to trainers on what is required both in writing and verbally (in teleconference briefing sessions and over the phone in response to ad hoc queries).

Due to random allocation we can expect the three study groups to be balanced on known and unknown confounders at the point of randomisation. Differential loss to follow-up may, however, occur during the course of the study, and once post-test data are available we will need to check the sample to ensure that it remains well-balanced on pre-test/baseline measures.

Analysis of the primary and secondary hypotheses will use an intention-to-treat approach, comparing outcomes for those pupils that were designated by schools to take part in the intervention. Outcomes will be compared using analysis of covariance (ANCOVA) using key stage 1 reading assessment data as baseline.

The effect size on the primary outcome for FSM pupils will be calculated using a separate model as FSM pupils are EEF's target group. In addition to the subgroup analysis on FSM pupils an appropriate statistical test of interaction will be used to assess whether there is a difference between FSM and non-FSM pupil. The EverFSM indicator in the NPD will be used to conduct this analysis.

Secondary analysis will include pupil, teaching assistant and school-level characteristics as covariates. Pupil data will include key stage 1 reading assessment (baseline) data, free school meal eligibility, sex and age. TA covariates will include experience measured as years of working as TA and an indicator of higher level TA training. School level characteristics will include proportion of SEN pupils within the year group and a deprivation indicator.

Pupil-level covariate data will be obtained from the National Pupil Database. TA covariates will be collected at baselines from participating schools.

Having the UPNs will allow EEF to continue to track the future academic progress of these pupils if desired.

3 Methods – Process evaluation

We will conduct a process evaluation alongside the RCT to evaluate the implementation of the programme and the extent of fidelity to the model, as well as necessary conditions and barriers to success. The main research questions that will be answered are:

- What are the key success factors and barriers to successful implementation in a scaled up train the trainer model?
- To what extent is fidelity to the core elements of Switch-on maintained when implementation is scaled up?
- What are the direct and indirect costs of delivering Switch-on?

In relation to the question on direct and indirect costs, the research will seek to evaluate the cost per pupil of the intervention. The approach set out in EEF's published guidance will be followed. Calculating the average cost of delivery enables comparisons to be made with other interventions based on both the average effectiveness and costs incurred. The total cost per pupil will be calculated based on information provided by the delivery team and schools about direct and indirect costs incurred.

The process evaluation will include a number of elements:

3.1 Observation at training sessions

The research team will attend one training session each time these are held (in July and October 2015). This will enable the team to introduce the research to the trainers and make sure that the requirements of the evaluation are clear. As the main point of contact for schools in Switch-on, trainers play an important role in encouraging and supporting schools to cooperate with the evaluators. It is important that they are well-equipped to respond to questions or re-direct them to the evaluation team where necessary. Attending the training session will also provide the research team with further insight into the delivery of the programme. Information gained from these events will be used to develop research tools such as the topic guide for trainer interviews.

3.2 Post-intervention survey

At the end of the intervention, both intervention and control schools will carry out a post-intervention survey. The purpose of this will be to map intervention and delivery in implementation schools and to gather an overview of the other interventions which may have been delivered in control schools and what 'business as usual' meant for each school. As with the pre-randomisation survey, the link to the survey will be sent to the Switch-on coordinator in each school. In control schools, the coordinator named on the Memorandum of Understanding as the main contact for the trial will be sent the survey.

At this point, dosage and fidelity information will also be collected by asking schools whether the same TAs worked with the pupils throughout the programme, whether any TAs left the school, whether any pupils left the school and whether the programme was delivered fully in the way it was intended.

Its other main purpose will be to collect cost information from all schools which will complement the cost information gathered from the developers. To help maximise response, we will ensure questions related to cost are kept as simple as possible.

3.3 Registers to collect information on pupil attendance at Switch-on session

During the ten-week Switch-on intervention period, TAs in the treatment schools will be expected to provide Switch-on trainers with information about whether pupils attended all of the scheduled sessions or whether there were absences. This information on the 'dosage' of the intervention will be analysed and inform an assessment of whether fidelity has been maintained in implementation. Trainers will upload information on attendance to a secure FTP site so NatCen can access it. Trainers will also be responsible for providing the evaluation team with information on attendance at the TA training sessions and support visits. Again, we will use a secure FTP for transfer of information.

3.4 TA interviews

The research team will carry out 20 depth interviews with TAs in treatment schools (ten schools from each treatment arm) who have been trained in Switch-on and are delivering it. 14 of these will be carried out over the phone and six will be undertaken face to face as part of the case studies (see below). We expect interviews to last between 45 minutes and one hour. The purpose of these interviews is to collect the views of TAs on a range of topics including:

- the training they received
- their workload
- delivering the programme
- materials
- views on whether the programme works more successfully with some groups than others, and why
- views on the facilitators to successful implementation
- views on the barriers to successful implementation
- impact on children and reasons for this
- suggestions for improvements to the programme

Interviews will be arranged for a time that suits TAs and they will be sent an information leaflet and will have the opportunity to opt-out. We will contact TAs initially by email. An online booking system, BookingBug will be used as a recruitment aid. This online system allows participants to follow a link sent via email and choose a time slot for interview that suits them. We will follow up by telephone where necessary to arrange interviews.

We will aim to achieve a sample that includes TAs in both treatment arms (Switch-on Reading and Switch-on Reading and Writing) and represents a range of: numbers of years' experience of working as a TA; qualifications; school approaches to training, inducting and supporting TAs; school size; school type; local authorities. We will also aim to include schools with different numbers of Switch-on TAs and pupils.

3.5 Case studies in schools

In addition, the research team will develop six case studies of schools. The aim of the case studies is to build broader understanding of how the programme has been implemented and is running in different schools.

We will carry out half-day visits to selected schools. Visits will take place around the eighth and ninth weeks of the ten-week Switch-on programme and will include:

- Watching a Switch-on session to view the programme in practice
- TA interview
- Classroom teacher interview
- School coordinator interview

We will use information from the baseline survey to select the schools. At this stage, we expect the case study sample to include schools of different sizes, types, geographic locations, different approaches to deployment, training and management of TAs and different numbers of Switch-on TAs and pupils.

Watching a Switch-on session will allow the research team to tailor subsequent interviews with school staff to the specific school context.

The classroom teacher interviews will cover topics such as: the work load created by the programme (this will be used to calculate in-kind contributions/indirect costs as part of the cost evaluation); if and how they have worked with Switch-on TAs; the barriers and facilitators to implementation; their views on the content of the programme and its suitability for their pupils; how the programme fits in with their curriculum and schemes of work; perceptions of benefits to pupils; and suggestions for improvements to the programme.

The school coordinator interviews will cover similar topics to the classroom teacher interviews including the work load created by the programme, the barriers and facilitators to implementation and to sustaining the programme across the ten weeks and any improvements they would make to the programme.

Each of the interviews will last approximately 45 minutes.

3.6 Trainer interviews

We will conduct depth interviews with five trainers in the final weeks of the programme. These will take place over the phone and will last approximately 45 minutes. They will cover topics such as:

- The training they received
- The training they provided to TAs
- How well different types of schools engaged and reasons for this
- Workload for the trainers and time spent on administration and school communications
- Barriers to implementation in different types of school
- Examples of successful implementation in schools and the reasoning and details of this.

Trainers will be selected to include different local authority areas in different regions in England. For example, we could select one local authority each in the South East, South West, Yorkshire and Humber, Midlands and North West.

3.7 Developer interviews

Depth interviews with both developers will take place over the phone and last approximately 45 minutes. These will enable the research team to fully understand the rationale behind the programme, its aims and objectives, how it would be implemented ideally, and how they feel the implementation has run in practice.

4 Ethics and registration

4.1 Parental consent

All schools that sign a MoU will send out letters to parents of all Year 3 children. NatCen will provide the letter so schools will just need to print and send out. This letter explains that the school is taking part in the study and provides the opportunity to opt their children out of participating in the Switch-on trial. Specifically, the letter will ask for consent:

1. For their child to take part in Switch-on (should the school feel this is of benefit to them)
2. For researchers to observe a Switch-on session
3. For the school to send data securely to NatCen. This will include the child's name, their date of birth, their Unique Pupil Number and their current English level. The letter makes clear that NatCen will hold this data securely and will only use it for research purposes. Nobody outside of the project team will have access to the data. The data will be securely deleted after the project has ended.
4. To link their child's data to the National Pupil Database (NPD).
5. For their child to take part in a reading test for all Year 3 pupils, during school time in the Summer term 2016.
6. For data from the NPD to be shared with NatCen and then stored in the Education Endowment Foundation's archive (which is managed by the Fischer Family Trust) and in anonymised form to the UK Data Archive.

NatCen will provide clear instructions to schools to maintain a log of opt outs, requests for which can be made using a return slip attached to the letter, by email or letter or verbally by speaking to a member of school staff. If parents opt their children out of the trial, schools will not provide any information in the pre-randomisation survey to NatCen.

4.2 Process for ethical approval

NatCen has a robust ethics governance procedure. Research projects are scrutinised by the NatCen Research Ethics Committee (REC). The committee consists primarily of senior NatCen staff. If necessary external research experts or professional experts ('lay people') may also be invited to review individual studies. Depending on the nature of the research and the perceived level of risk, projects undergo

either an expedited review (scrutiny by the REC Chair) or a full review by the sitting REC. For this evaluation we believe that a full review is appropriate.

The REC procedure is designed to provide ethical advice and guidance, and to ensure that all research undertaken by NatCen is ethically sound and meets the ethical standards of government and other funders. The process provides reassurance to potential research participants and, where relevant, to gatekeepers through whom they are approached.

The REC has reviewed the design of this project, provided guidance that has been incorporated into this final protocol, and will continue to be involved on an ongoing basis. For example, as research tools are

5 Study timetable

The table below shows when each of the main components of the study will take place.

<i>Date</i>	<i>Task</i>
September 4 th and 7 th	NatCen briefs the 22 trainer (2 teleconferences)
September 2 nd -18 th	Memorandum of Understanding (MoU) received from schools
September 3 rd – 18 th	School instructions & opt out letters sent to schools
October 5 th	Link to Information Form (pre-randomisation survey) emailed to schools
October 16 th	All Information Forms completed by schools
October 23 rd	Schools informed of group allocation
November 2015	Trainers train participating TAs
Week commencing January 4 th	Delivery of intervention begins starts for Groups 1 and 2 (Switch-on Reading and Switch-on Reading and Writing)
February 22 nd – March 4 th	Scheduling visits to schools takes place by NatCen invigilators
Weeks 7, 8, 9 and 10 of the ten-week intervention period	Qualitative research for the process evaluation (trainer and developer interviews in weeks 7 and 8, case studies in weeks 8 and 9, and TA interviews in weeks 9 and 10)
January 4 th -March 8 th	Information on dosage collected from schools on an ongoing weekly basis from schools (via trainers)
March 18 th	Intervention ends
April 4 th	Link to 2 nd Information Form (post-intervention survey) emailed to schools
April 11 th – 22 nd	Pupil testing takes place
April 22 nd	All follow up surveys completed by schools
April 29 th	All pupil testing complete

6 Evaluation team

The project is managed in the Children, Families and Work Group at NatCen. The trial manager will be Rakhee Patel (Research Director), assisted by Sarah Haywood (Senior Researcher) who is experienced working on school based, and other EEF projects. Sarah and Rakhee will be supported by other researchers in their team. The researchers will work closely with other departments and specialists at NatCen including the evaluation team, statisticians and the Operations Department. Nico Jabin, an evaluation expert at NatCen will lead on randomization and impact analysis. CVs and experience of the project team are available on request.

a. Main risks to evaluation and mitigating actions: Analytical, procedural and managerial

Risk	Likelihood	Impact	Mitigation
Drop out – school may decide to leave the study thus reducing the study sample size	Low	High	We will draw on our experience of working closely with schools to ensure interest in and cooperation with the study is maintained, addressing practical concerns as necessary, and ensuring the benefits of continued participation are made clear. We will also stay in close contact with the 22 Switch-on trainers to identify any problems with particular schools early on
Difficulty in obtaining parental consent for access to pupil data – risks to sample size and under-representation of pupils with certain characteristics. Consent rates may vary across schools.	Low	Medium	We will work with schools to obtain consent from as many parents as possible, ensuring parents are aware of the benefits. If handled carefully, this consent should not be a significant problem – parents are used to being asked for their consent on a regular basis for a variety of school activities. The use of opt-out rather than opt-in consent also mitigates risk and helps to ensure that more vulnerable pupil groups are not inadvertently excluded from the study.
Loss to follow-up – could be a problem if overall sample loss is large (reducing absolute sample numbers)/patterns of loss differ between study groups.	Low	High	The best way to tackle loss to follow-up is through well-designed fieldwork procedures. We have assumed that some Year 3 pupils will be absent when the testing is scheduled and so we will need to make alternative arrangements. This has been factored into the research timetable and resource planning.
Variations in treatment delivery – significant departures from the Switch-on model may affect interpretation of treatment effects/or reduce effectiveness.	Low/medium	High	The process evaluation will explore variation in treatment delivery across schools and consider the implications for study results. We will do this by collecting information on dosage and seeking information on delivery of Switch-on in the implementation survey and interviews.
NPD data access denial	Low	Medium/high	Were we unable to negotiate access to NPD records, we propose to work closely with schools in order to gain access to school level records used to compile the NPD
Difficulty scheduling case study visits.	Medium	Low	We will contact case study schools well in advance of the visit to allow them time to plan and schedule the visit to their convenience (4-6 weeks). We will be clear about what taking part involves so informed decisions can be made. We will also highlight the benefits of taking part such as an opportunity to showcase good practice, a chance to take time to reflect on the delivery and impact of Switch-on, and a chance to provide feedback on what could be improved. If absolutely necessary, telephone interviews would be conducted as part of the case study research. Progress will be monitored closely to ensure any problems in setting up visit are identified early.
Changes to project specification affecting timetable/costs	Medium	Medium	We have allocated sufficient resources to the set-up stage for the design to be clarified in detail allowing us to revise costs/timing where necessary and provide a robust estimate.
Poor project management	Low	Medium	We have proposed a strong team experienced in managing complex evaluations. We will monitor progress closely and identify areas of concern early.

Staff illness / unavailability / turnover	Low	Low	We forward-plan research capacity, and have a sufficient number of experienced staff members. Our procedures ensure that decisions and progress are fully documented.
Loss of or damage to data	Low	High	NatCen has high quality data security procedures with which team members are experienced. EEF will be notified of any breaches and contingency plans put in place.
The timetable for the study is challenging. In particular, schools have a relatively narrow window to complete the pre-randomisation survey. Schools will be sent a link to the survey in early September as soon as they have signed an MoU and then must submit the survey by mid-Oct	Medium	Medium /High	<p>The deadline for schools to complete the pre-randomisation survey by mid-October is driven by the need for randomisation and allocation to treatment/control groups to be completed by October half term so that schools have sufficient time to plan cover staff for when TAs attend training in November.</p> <p>To mitigate the risk of slippage or insufficient returns of the baseline survey we will:</p> <ul style="list-style-type: none"> • Make sure trainers understand the timetable so they can encourage schools to comply. This will be emphasised in printed briefing materials and briefing teleconferences • Keep the survey clear and simple and make sure it includes concise instructions • Use a dedicated member of the team to liaise with schools (answer questions, chase late submissions, keep logs of outstanding submissions) • Closely monitor progress