

Evaluation Summary	
Age range	Year 1s, with data from Reception to end of Year 2
Number of pupils	Minimum: approx. 5,000 pupils (Y1s in 120 schools, ca. 43 pupils per Y1) Maximum: approx. 7000 pupils (Y1s in 160 schools, ca. 43 pupils per Y1)
Number of schools	Minimum: 120 (60 intervention, 60 control) Maximum: 160 (80 intervention, 80 control)
Design	School-randomised trial; with quasi-experimental analysis for a 'target' group (i.e. FAST target children in intervention schools, and NPD-matched children in control schools)
Primary Outcome	End of KS1 assessment

Note: This protocol excludes aspects of the evaluation that are the sole responsibility of providers and are not requirements of the EEF or NFER.

Introduction

Background and rationale

The Education Endowment Foundation (EEF) wish to evaluate the Families and Schools Together (FAST) programme through an RCT using an effectiveness trial design. The programme was founded in the USA by Professor Lynn MacDonald in 1988 (see section 1.2). Middlesex University are the UK license holders for FAST. Save the Children UK (SCUK) delivers FAST in UK primary schools.

FAST has been extensively evaluated (both in the US and UK) for its impact on outcomes relating to children's social, emotional and behavioural development and parental engagement, relationships and self-efficacy (Kratochwill *et al.*, 2009; McDonald *et al.*, 2006). Several RCTs have been conducted in the US on FAST, reporting improvements in children's social skills and reductions in their aggression and anxiety, and reductions in parents' social isolation (Kratochwill *et al.*, 2006; Moberg *et al.*, 2007). However, there is limited evidence of any attainment impact of FAST. That said, the EEF Toolkit¹ contains encouraging evidence for the effectiveness of parental engagement with pupils' learning more broadly.

The FAST programme is underpinned by a theory of change whereby improvements in children and families' behaviour, relationships and social capital are thought to spill

¹ <http://educationendowmentfoundation.org.uk/toolkit/parental-involvement/>

over into the wider school environment beyond those children and families taking part in the 8-week programme. Indeed, FAST is implemented in England with the whole school in mind. Together, these support a strong line of enquiry that social and behavioural outcomes may lead to performance improvements – not only for FAST target pupils, but within the FAST participating school.

The RCT designed here will assess the effect of FAST on attainment as the primary outcome. The evaluation will also explore children's personal, social and emotional outcomes as measured by the Goodman's Strengths and Difficulties Questionnaire (SDQ) through secondary outcome analyses. It will also explore perceived impacts on family relationships and wider parent/parent-community outcomes through a process evaluation. This will involve pre- and post- activity pro-formas for all participating schools; the completion of attendance logs in all intervention schools; and telephone interviews, observations and case studies in a smaller number of schools to gather senior leader, teacher, delivery partner and parent views on implementation and how the programme delivers outcomes. It will include views on *FASTworks* phase of the programme, which to date has not been extensively evaluated.

Intervention

FAST is a parental engagement programme that has been run in a number of countries over the last 25 years. The programme was founded in the USA by Professor Lynn MacDonald in 1988. Parents and their children attend eight weekly 2.5-hour group sessions, delivered by local 'partners' who are trained by accredited FAST trainers. The eight weeks are highly structured, and each week includes: regular 'hello' songs/activities, 'table time' (where parents and their child work together on a specific project), family communication exercises and 'parent time' (with supervised free-play for children and structured parent communication exercises), group activities, and a weekly meal cooked by a family and shared by the group. Each session closes with a regular wrap-up and closing activity. The sessions are held as 'twilights' usually from 3.30pm–6pm, for one evening per week.

Local partners receive training once schools have signed up to FAST through a partnership agreement. The training is usually held as a 2-day course, about 3–4 weeks before the 8-week cycle. The training is delivered by certified FAST trainers (accredited in Evidence-Based Parenting Programmes by Middlesex University). The local partners include school partners (members of staff that the school releases for training), community partners (e.g. social workers, health visitors, police), and parent partners (parents of children who are not taking part in the programme). Each 'Hub' has between four and six partners (with a minimum of two community partners, and one or two each of school and parent partners). Volunteers are also involved (but not trained), e.g. school kitchen staff.

FAST aims to improve parenting skills and confidence, parents' engagement in their child's learning, the child's/children's behaviour, and potentially their learning and attainment. Save the Children's working logic model for FAST outlines three outcome

areas: i) success as school (including child's behaviour, and parental engagement with their child's school and learning), ii) strengthened families (including family cohesion, relationships and parents becoming the primary prevention agents for their children), and iii) community cohesion (including reciprocal support between parents, increased links with appropriate community services, and empowering parents in their everyday life).

Families completing six of the eight sessions (75%) 'graduate'. Parents may then continue to meet on a monthly basis for two years (22 months) after the initial 8-week programme. This aspect of the programme (known as *FASTworks*) is less formalised, and varies in nature and content according to how the parent group or Hub wishes to continue.

The current UK FAST programme is delivered by Save the Children, via a license agreement held by Middlesex University and the FAST programme team in the USA. Parental opt-in consent is obtained via SCUUK/ Middlesex University before the start of the 8-week cycle (i.e. in week 0). Parents and teachers complete questionnaires before, and at the end of, the 8-week cycle.

Evaluation plan

Research questions

The **primary research question** is: What is the impact of FAST on the Year 1² children in FAST schools in terms of their attainment at the end of Year 2 measured by Key Stage 1 tests?

The **secondary research question** is: What is the impact of FAST on the Year 1 children in FAST schools by the end of Year 2 in terms of behaviour³ ('difficulties measures'), pro-social outcomes⁴, and impact measures⁵? (as measured by the Strengths and Difficulties Questionnaire (SDQ), Goodman, 1997, at a whole-year-group level)

Further research questions include:

Sub-group questions (see section 2.6.1):

Are there any differences in **primary outcome** by FSM-eligibility, randomisation 'block', prior attainment, and baseline SDQ aggregated score

On-treatment questions (see sections 2.6.3 and 2.7):

What is the effect on primary outcome of 'graduation' (or not)

² Children in the intervention and control schools will be in Year 1 in the year of FAST delivery. They will be at the end of Year 2 when KS1 assessments and follow-up SDQ administration take place.

³ There are four 'difficulties measures', which added together create a maximum score of 40.

⁴ The pro-social score, maximum 10, is reported separately to the difficulties measures.

⁵ Further impact questions are also assessed.

What is the effect on primary outcome of further *FASTworks* dosage?

Quasi-experimental questions (see section 2.6.2):

What is the impact of FAST on children of parents who actually take up FAST (i.e. the target group) in terms of attainment (i.e. the primary outcome)?

Process questions (see section 2.7):

How do staff, parents and children engage with the FAST programme? And what are the connections between how the 8-weeks FAST programme is delivered and the wider Y1 group?

Does any variation in the nature of *FASTworks* engagement affect the primary and secondary outcomes?

Design

The evaluation will be underpinned by a shared working Theory of Change. This will posit how FAST expects to impact on attainment at the wider year group level. SCUK also have a working logic model for FAST, which will inform the ToC discussions. . The ToC will inform understanding of the programme, analyses specifications, process evaluation instruments, and interpretation of the findings.

A school-randomised design

This trial is designed as a whole-school randomised effectiveness trial, with two main arms (intervention and control). It will also contain a quasi-experimental pupil-level analysis. These two strands are outlined below.

1) The school-level design takes account of the theory of change that all children in the year group/key stage may benefit from some of their peers taking part. Indeed, this spill-over effect is intended by the programme, and so is part of the evaluation investigation. The school-level design also takes account of 'real-world' recruitment, whereby FAST recruits schools to the programme, not individual parents. Parents are then invited to join the programme by trained parent, school and community partners, but the programme does not expect all parents in a given year group to join. Hence, the reasonably large-scale nature of the design is necessary to account for 'dilution', i.e. from participating FAST children and parents to the whole year group.

The school-level design will evaluate i) outcomes on attainment for all Year 1 individuals in the trial (end of Key Stage 1 (KS1) assessments, with Early Years Foundation Stage (EYFS) scores as a covariate), (excluding any whose parents have opted-out of such access to their child's data). And ii) outcomes from the SDQ for all Year 1 children, anonymised and then aggregated at school level.

2) The quasi-experimental design will explore how the participating target FAST children (i.e. those involved in the 8-week programme) are impacted in terms of

attainment, by creating a matched sub-sample from the control schools (using NPD-matched data from known individuals) (where consent has not been withdrawn).

The intervention group will also form part of the process evaluation (see section 7).

Randomisation

Randomisation of schools will take place in three termly blocks, to match SCUK's termly recruitment (see section 2.3.2).

Within each termly block, randomisation will take place in two regional blocks (North and South) to ensure a split of delivery for operational reasons. If required, within each termly block, there will also be an earlier (a) and later (b) block to allow for set-up time (post-randomisation) with the earlier schools (a), and to recruit later schools (b). Schools that miss the cut-off date for baseline data completion prior to randomisation, will be offered a place in a subsequent randomisation.

The timetable for randomisation will take account of Save the Children's FAST recruitment processes and NFER's baseline data collection requirements with schools; and then subsequent FAST pre-programme activity that needs to take place before an 8-week cycle can begin (this includes recruiting local delivery partners, and running the 2-day training about 3–4 weeks before an 8-week cycle, which allows time for local partners to then engage parents in the programme, and sign them up in week 0). Randomisations will take place in the term preceding a delivery cycle. The latest that implementation can start in schools in Summer term 2016. Table 1 presents the target randomisation blocks, with a minimum of 12 schools per randomisation.

Table 1: Randomisation blocks (example)

Randomisation block	No. of schools	Total no. of schools
• Randomisation for Autumn 2015 delivery		
• Early block (1a) North (June 2015)	• 12 schools	• 48 schools
• Early block (1a) South (June 2015)	• 12 schools	
• Later block (1b) North (July 2015)	• 12 schools	

• Later block (1b) South (July 2015)	• 12 schools	
• For Spring 2016 delivery (one termly block ⁶)		
• Block 2 North (Nov 2015) (split into blocks 2a and 2b if required)	• 20 schools	• 40 schools
• Block 2 South (Nov 2015) (split into blocks 2a and 2b if required)	• 20 schools	
• For Summer 2016 delivery		
• Block (3a) North (Jan 2016)	• 8-18 schools	• 72 schools
• Block (3a) South (Jan 2016)	• 8-18	
• Block (3b) North (March 2016)	• 8-18	
• Block (3b) South (March 2016)	• 8-18 schools	
Total no. of schools		• 120 – 160 schools

NFER will notify schools of the outcome of randomisation (i.e. whether allocated to the intervention or the control group). NFER will notify SCUK of the intervention schools. (See section 3.3 on lines of communication.)

Participants

Inclusion criteria for schools

To be included in the trial, schools must be primary schools in England, with Key Stage 1 pupils. Schools must not have taken part in FAST in the past. Save the Children will recruit schools to the trial with greater than 20% of pupils eligible and in receipt of FSM. Schools can come from the maintained sector, free schools, academy chains; but not from the private sector. Save the Children will consider achieving a country-wide spread of geography, including urban and rural, when recruiting schools – in particular to avoid all schools in the trial being located in one or two patches, or in the north only or south only.

Recruitment of schools

Save the Children will recruit schools to the trial, via their FAST Programmes Managers. Save the Children will hold a 2-day workshop on the trial and recruitment for their Programmes Managers. The evaluators will attend a session during the workshop to explain the trial.

⁶ Easter falls early in 2016 so this block is designed with one randomisation date only.

Programmes Managers will employ their usual practices for recruiting schools (for example, providing information sheets to schools about FAST), but in addition will adhere to some Evaluation protocols including:

Recording schools' expressions of interest in the trial, prior to sign up.

Sharing an Agreement with interested schools, which outlines i) the Evaluation activities schools will be required to complete in order to join and take part in the trial, ii) how their children's data will be used, iii) feedback and incentives.

Save the Children's recruitment of schools will happen in three termly blocks. However, recruitment can also be ongoing; if a school expresses an interest in one term but is unable to take part straight away, they can be included in a randomisation block for a later start date. NFER will run a check on the balance of recruited schools at the end of each term's recruitment (e.g. in terms of north/south and FSM criteria).

SCUK will provide recruited lists of schools to NFER, at specified timepoints, including school DfE no., school postcode and a lead contact name and email address for each school, via a secure portal. NFER will then undertake baseline data collection with schools, prior to randomisation. Schools that complete the relevant baseline data after each recruitment block can go forward to randomisation. The baseline data completion includes: obtaining parental opt-out consent for use of individual pupils' UPN/name/DoB to match to EYFS NPD data and KS1 assessment data, schools' upload of UPN lists, completion of a baseline school proforma, and a teacher completed Strengths and Difficulties Questionnaire (SDQ) for each Y1 child. See Sections 2.5, 2.7, 3.2.

Parents joining the programme

All parents of pupils who will be in Year 1 in the academic year 2015/16 are eligible to take part in FAST. In practice, FAST works with around 25 families per school (and up to 40) split into hubs of 8–12 families to aid implementation. The FAST offer is universal, although there can be some element of informal targeting or inviting specific parents to take part (by the trained parent partner or other local partners). This nature of FAST will remain unchanged for the trial.

As part of baseline evaluation activities prior to randomisation, all recruited trial schools will provide an opportunity for their Year 1 parents to opt-out of their child's data (EYFS NPD data and independently assessed KS1 data) being accessed and used by the evaluation.

If randomised to the intervention group, and if invited to join the 8-week cycle, the parents will complete an opt-in consent form as part of normal FAST practice. This will include a statement about NFER accessing the pre- and post- FAST/Middlesex data.

Maintaining contact with schools

NFER and Save the Children will agree processes for maintaining contact with schools. NFER will maintain contact with schools for all aspects of the Evaluation data collection. (See section 3.3.)

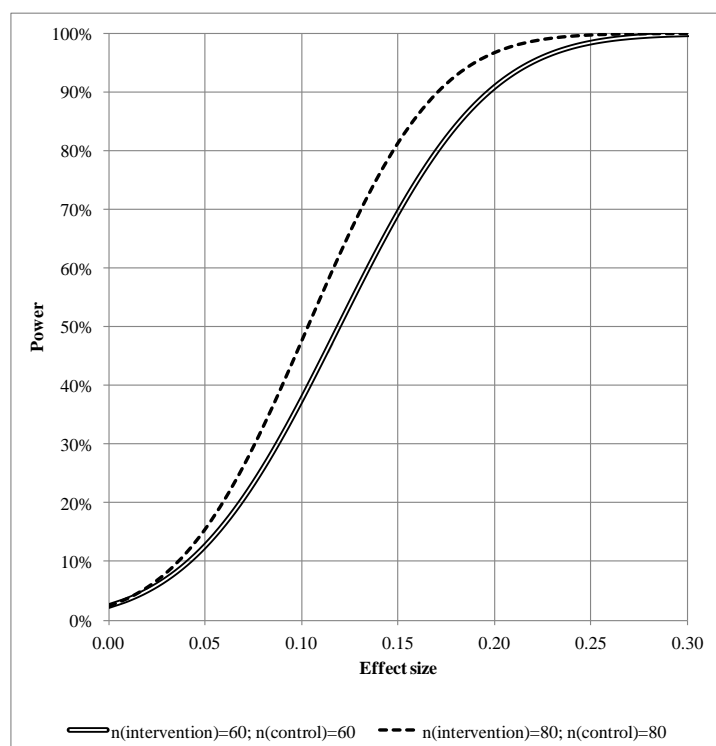
Sample size calculations

As the design incorporates the real-world element of parents' being invited to join the intervention itself (within FAST-engaged schools), sample size calculations take account of the dilution of any FAST effect (as not every family in a FAST school will participate). Results of meta-analyses, summarised within the EEF toolkit, identify that the effect size of parental involvement on attainment could be as high as 0.6 (Jeynes, 2005 and 2007) (although a typical effect size is 0.26). If every family in Year 1 volunteered, the trial would be over powered to detect a 'typical' parental involvement intervention of effect size=0.26 (from meta-analyses summarised within the EEF toolkit) with the proposed minimum number of schools (60+60). However, FAST typically runs with 25 (and up to 40) families (8–12 per hub) in a school and these families are typically from Reception and Year 1. Assuming around 15 families volunteer from Year 1 this represents around 1/3 of families in an average primary school cohort.

Figure 1⁷ shows that with 60+60 schools, this trial is powered to detect an overall (i.e. diluted) effect of 0.17 and with 80+80 schools, the corresponding effect size is 0.15. Assuming the rate of dilution described in the previous paragraph, FAST needs to have an effect of between 0.45 and 0.5 on families that volunteer assuming no spill-over effects on other children. I.e. FAST needs to have a large enough effect on the participating target children for knock-on to the wider Year 1 group (assuming positive knock-on effects).

⁷ Assumptions: ICC=0.16 (from multi-level model of PiE 6 follow-up; EYFS baseline; data from Oxford literacy and numeracy trial) correlation between EYFS baseline and PiE/PiM 6 follow-up=0.62 (from Oxford literacy and numeracy trial). Expected number of pupils per school for eligible schools (top FSM quintile)=43.

Figure 1 Power curves for 60+60 schools and 80+80 schools



Outcome measures

Outcome measures

The **primary outcome** for this trial is a weighted overall score from end of Key Stage 1 assessments⁸ (tbd when the new assessments become available). End of EYFS scores from 2014/15 will be used as a baseline covariate (this data is available from NPD).

The **secondary outcomes** will be from the SDQ – difficulties measures, pro-social measures and impact measures.

Baseline data

Baseline data for all Y1 children for whom consent has not been withdrawn will include: Unique Pupil Number, name and date of birth; EYFS scores from 2014/15; and a Goodman's Strengths and Difficulties Questionnaire fully completed by the child's class teacher and then anonymised (see Section 2.5.4).

⁸ Tbd when the new assessments become available. We are currently considering a combination of Reading Paper 1, Reading Paper 2, Mathematics reasoning, and Mathematics arithmetic.

Key Stage 1 assessment

Key Stage 1 assessments are normally administered by class teachers, marked in raw format, and then moderated within schools as part of usual practice based on knowledge of the child and other formative information, before the results are entered onto NPD. For the purposes of this trial, NFER will collect KS1 test papers by courier from schools to be independently marked – in addition to usual teacher marking. As KS1 testing is part of schools' usual practice, and is part of statutory requirements, the limitations of not invigilating these tests have been balanced with the expense of independently administering tests in 160 schools.

The risks of bias are slim. For bias to occur, a teacher would have to (advertently or inadvertently) assist a child/children in a FAST school differentially to a child in a control school during a statutory national test. However, we consider this a highly unlikely scenario. Testing will take place a whole year or more after the 8-week FAST delivery, most likely with a different class teacher, and hence teachers are unlikely to link conducting this test with the intervention. Key Stage 1 testing is statutory, and we expect schools to follow their normal procedures.

Key Stage 1 marking

Key Stage 1 assessments are currently teacher assessed and moderated, prior to schools/local authorities submitting results to the NPD. To avoid bias, independently marked Key Stage 1 assessments will form the primary outcome data. Where schools opt to mark their test papers prior to being independently marked, teachers will be invited to use an online marking system. Teachers and markers will be able to access this 'blind', to avoid any physical marks being made on papers (and hence potential 'teacher marking influence' on independent markers). Where schools allow independent markers to use the scripts prior to their own marking, markers will not amend the papers in any way, but will use the online mark system. From the information currently available about KS1 tests in 2017, we anticipate using Reading paper 1 and Mathematics Arithmetic to create an aggregate score.

'Trial' SDQ administration

The SDQ will be completed by class teachers about all trial pupils at baseline (prior to randomisation), after the first eight weeks of FAST, and then in June-July 2017 alongside the end of Year 2 assessments (to aid maximising response rates). This will be completed in both intervention and control schools, for each Y1 child, and then anonymised, before being transferred to NFER by each school. The Teacher-completed SDQ is a standard instrument designed specifically to be completed by a child's teacher or other key teaching personnel. A limitation here is that this instrument cannot be completed or administered by an independent evaluator. Whilst there is no risk of bias at baseline (as the baseline SDQ is completed prior to randomisation), there is a slight risk at mid-point and end-point. I.e. These assessments might be completed differentially by teachers in intervention schools compared with teachers in control schools. This is the case with all self-complete or

perceptual data, where participants know which group they are in. We will discuss this at interview, and also look at results in the context of SDQ data collected elsewhere by Middlesex University (see sections 2.5.6 and 2.9).

FAST group SDQ data

The usual FAST pre- and post- teacher and parent questionnaires will be completed by the FAST intervention participant group. NFER will have access to relevant fields from the FAST target Year 1 questionnaires (completed by their teachers and parents in Week 0 of the programme, and at the end of the 8-week cycle). Save the Children will provide a list of the target Year 1 pupils by name and date of birth, to NFER. Middlesex University will provide NFER with access to the relevant target Year 1 pupils' results.

Analyses

Intention-to-treat: primary and secondary outcomes

The main analysis will be intention-to-treat. The primary outcome will be a weighted sum of Key Stage 1 English and maths scores that will be determined when the new assessments become available. EYFS from NPD from this academic year (2014-15; the last before the introduction of new baseline tests) will be used as a covariate in the model. As this is a cluster-randomised trial, we will use a multi-level model of pupil-level data to ensure robust standard error estimation.

For the secondary outcomes, we will use the standard scoring system to obtain SDQ results for the difficulties measures, the pro-social score, and the impact measures. We will use pre-specified SPSS syntax available from the SDQ website to derive these measures. Due to the requisite anonymity of secondary outcomes, analysis will be at the school-level. (Note, the SDQ will be completed for all Y1s anonymously, whilst the NPD primary outcome data will take account of opt-outs, see section 3.2. It is therefore possible that the primary and secondary datasets will relate to slightly different pupil samples. This does not present a problem for analysis purposes, as the SDQ dataset will be treated at a school-level, not an individualised level.) Anonymous pupil-level results will be aggregated to school-level and modelled using a single-level regression model with the corresponding baseline measure as a covariate. A small number of pre-specified subgroup analyses, including FSM-eligible pupils, randomisation 'block' and prior attainment, will be carried out through the use of interaction terms in the model – for the primary outcome. The termly randomisation blocks mean that some schools receive considerably more of *Fastworks* than others. For this reason, it will also be useful to include an interaction between block and treatment for the secondary outcomes too.

FAST target analysis

In addition, we will run an on-treatment analysis to explore outcomes for the FAST target pupils only – using a quasi-experimental approach matching FAST target

pupils to control pupils using prior attainment and other background factors, such as FSM eligibility, from NPD. Our approach will ensure ‘common support’ through propensity score matching followed by multi-level modelling. This analysis is observational rather than experimental as, whilst we could reasonably expect parents to engage in the programme in similar rates across experimental groups, we will not be able to measure the reasons why they participate and cannot reliably mimic participation in the control group⁹. That said, this approach provides a robust yet unidentified counterfactual in the set of parents who could have engaged had they been randomised to FAST.

By conducting both the main analysis and the FAST target group analysis, we will obtain crucial evidence on the quasi-effect of FAST for target children, and the effect for whole year groups as per the theory of change spill-over effect.

On-treatment analysis

On-treatment analysis will include analysis of dosage (in terms of ‘graduation’ or not), in order to investigate whether there is a link between the extent of engagement by parents and pupil outcomes. This will form a variant of the FAST target analysis described in 2.6.2 where a subgroup of FAST target pupils are identified as having graduated. It will also include analysis of *FASTworks* dosage, for the target group. It may also be beneficial to include a school-level measure of *FASTworks* dosage (see section 2.7) in a model including the whole cohort’s results. Such extra analyses will be detailed in the analysis specification to be drawn up once the trial is registered.

Process evaluation

The process evaluation will explore the implementation of the FAST programme in schools – with a focus on lines of enquiry that will be useful for schools (e.g. engaging parents in FAST, ingredients for successful longer-term *FASTworks*, how the target FAST programme makes a difference to the whole year group). It will provide insight into how the programme has been delivered, the engagement of staff, parents and pupils with the intervention, elements of successful delivery and how issues are or could be overcome in future delivery. It will capture parental-engagement efforts, and the resources required for the programme.

The process evaluation will collect information on:

- existing school interventions/engagement with parents
- how the programme is intended to work
- how the programme is being delivered in schools – set up, content, engagement
- how the programme sits within a wider school strategy
- the perceived impact of the programme
- recruiting parents, parental drop-out and the reasons for this

⁹ This scenario is unusual in that there is a robust counterfactual set of parents that would have volunteered had their school been randomised to FAST; we just don’t know who they are. In a conventional quasi-experiment, comparison schools selected may themselves be systematically different so such a counterfactual doesn’t exist.

dosage for the target Year 1 children and their parents (during the 8-weeks, recorded as graduated, or not)

further dosage and nature of engagement by the target parents during *FASTworks* future sustainability of the programme and its potential for wider roll-out.

There will be a three-tiered approach to process data collection:

1. Data collection with all trial schools (light-touch pre and post pro-formas)

- A member of each schools' senior leadership team will complete a brief open proforma providing information on parental engagement and family support interventions they have, or are about to, engage with (returned via the secure NFER School Portal)
- This will be collected prior to randomisation (asking about the previous 18 months), and again in summer 2017 (for the period September 2015 – July 2017) Pro-forma completion is part of schools' participation agreement. End-point pro-formas will coincide with the end-point SDQs and KS1 test collection.

2. Data collection with all intervention schools (FAST monitoring data; FASTworks monitoring data)

- The FAST team central coordinator will provide NFER with the FAST register, which records attendance across the eight weeks of facilitation (returned via the NFER School Portal). This form will be amended by SCUK to include identifiers (names and dates of birth) for the target Y1 FAST children and their parent(s) (with opt-in consent).
- A nominated school-partner, parent-partner or parent, for each Hub/school, will be required to continue a log of attendance and nature of activity for the following 22 months of the programme (*FASTworks*). SCUK and NFER will develop the log collaboratively. In addition to an attendance register, this log will have a small number of open boxes for the partner to answer questions such as how often do you meet, what do you do, who else is involved? This approach will require a nominated point of contact within each school/Hub (e.g. a trainer or parent-partner) to provide logs to SCUK who will then pass these centrally to NFER.

3. Data collection with a sub-sample of schools (training observations, programme observations, telephone interviews, case studies and follow-ups)

- Observation of up to three FAST training sessions (e.g. one per block), providing greater understanding of the theory of the programme and how it should be implemented in schools.
- Case study observation visits to 3 intervention schools (one per block, selected by geography, urban/rural, and school/Hub size) in weeks four – eight of programme delivery (phase 2) to observe how the programme is delivered.

- Short structured telephone interviews with a member of school staff, most likely the FAST coordinator, in 36 intervention schools (12 per block). Interviews will take place soon after the schools have completed the eight week programme and would capture information on delivery success and challenges, overall reflections of the programme and views on the future sustainability and roll-out of the programme. We will also remind about completion of the attendance log, if this has not been returned (although this is also monitored and chased by SCUK).
- Case study interview visits to these 9 intervention schools (3 per block) in an agreed week 9 of the programme (or in weeks four to eight above, if a week 9 cannot be arranged). This will include: interviews with one or two of the staff facilitating the sessions to explore implementation, engagement, strengths, challenges and perceived impact to date; an interview with a member of the school's senior leadership team, focusing on how the programme fits with the wider school strategy and its perceived impact; an activity with parents and children to gather their perceptions of the programme (when this would take place would be determined through discussion with individual school facilitators e.g. during/after a session); interviews (no longer than 30 minutes) with up to four parents in each school, exploring in greater detail parental perceptions, why they agreed to participate, perceived impact on their child and whole family and – for those who have dropped out - why? (these parent interviews would be done by telephone if a week 9 cannot be arranged).
- Follow up visits to the 9 case study schools one year later, conducting interviews with parents who have graduated, the FAST coordinator, a senior leader, and a relevant classroom teacher. Interviews will explore the lasting impact of the programme including perceptions of any spill-over effects within classrooms; and how parental planning and leadership of the monthly sessions (with school support) has developed relationships and networks that could impact on the future sustainability.
- Further telephone interviews in summer 2017 in the case study schools, with the parent partner or other local lead about *FASTworks*, expanding on the information in logs and question boxes, to explore networks and perceptions of social capital as an intermediate 'outcome' of the FAST programme.

Cost evaluation

Questions on the cost of programme delivery will be explored from the school's, local partners' and deliverer's perspectives. This will include both FAST and *FASTworks*. 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 FAST. As the programme is fully-funded for schools within the FAST trial, further cost information from EEF and SCUK will be sought 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.

Questions will be administered within the school follow-up proforma (in all intervention schools), during telephone interviews with the key contact in all intervention schools, during case-study interviews with teachers and local partners, and in discussion with SCUK. 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, and any out of hours room hire (if not covered by pre-requisite costs).

We will also report **'time'** in terms of the amount of hours spent by staff and local partners and other volunteers; and any re-allocation of existing resources (e.g. allocation of a school lead contact for the programme). We will report **pre-requisite costs**, which may include early years' play equipment and resources which a school may already have, and use of the school kitchen.

FAST will be considered within the wider context of the costs of other parenting 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 Year 1 pupil regardless of target-participation in the FAST 8-week cycle itself. **Costs per target pupil** will also be estimated (i.e. using the number of pupils whose parents participate).

As the programme itself involves both the **8-week FAST cycle**, and the further **22-month FASTworks** – a cost estimate showing both these aspects will be undertaken. From this, 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 further 8-week cycles.

Existing data

Data collected by Middlesex University will be used to inform the process evaluation. Middlesex University collect data relating to all parents and children participating in FAST at entry to the programme, and following the initial 8 weeks. This data will be used to provide contextual and baseline information about the target Y1 children and their parents participating in the programme. Data about others on the programme (i.e. those with children in other year groups) will not be shared by Middlesex University. It is intended that a smaller number of participants will be followed-up towards the latter stages of the *FASTworks* phase of the programme. Data originally collected by Middlesex will inform this data collection at a case specific level to gain an understanding of the progress made by FAST participants over the prolonged period.

Ethics and registration

Ethical approval

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 and approved by NFER's Code of Practice. NFER's data protection policy is available at: <http://www.nfer.ac.uk/nfer/about-nfer/code-of-practice/nfercop.pdf>. Fieldwork will be conducted in accordance with NFER's Code of Practice and SCUK's Safeguarding Guidance. NFER, SCUK and CCFR will work together to ensure each organisations' policies can be applied in practice.

In setting out the roles and responsibilities for this trial, the three parties (SCUK, NFER and EEF) will draw up a Memorandum of Understanding (MoU). This will include a description of the nature of the data being collected and how it will be passed to NFER.

In addition, SCUK will provide MoUs 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.

Consent

The consent required for this trial is set out in the table below. Consent will be sought for each 'blocked' cohort that is recruited.

Data	Nature of consent	For whom
EYFS NPD data	Parent opt-out	Intervention and control schools re. all their Y1 pupils
KS1 assessments	Parent opt-out	Intervention and control schools re. all their Y1 pupils
Trial SDQ questionnaire data anonymised	Parents informed, consent not required	Intervention and control schools re. all their Y1 pupils anonymised
FAST questionnaires	Parent opt-in	FAST target parents only (SCUK to obtain as usual part of FAST, with additional NFER wording)
FAST register (8-week cycle)	Parent opt-in	FAST target parents only (SCUK to obtain as above)
Process logs (<i>FASTworks</i>)	Parent opt-out	FAST target parents only / plus any other parents who get involved
Process interviews	Participant opt-in	FAST participants (teachers, parent-partners, parents, children)

Parent opt-out consent is sufficient for obtaining EYFS assessment data, and using KS1 assessment results, linked to individual pupil UPNs. No sensitive personal data will be obtained for the primary outcome analyses. SDQ data is considered sensitive, and hence to aid data collection across both intervention and control schools, SDQ will be obtained in anonymised form at individual level, and then analysed at aggregate level. Parental consent to use anonymous aggregated data is not required. However, parents will be fully informed of this approach in the parent information sheet.

Lines of communication

Intervention schools

NFER will inform schools that are allocated to the intervention group, after each randomisation. NFER will also notify SCUUK, so that SCUUK can commence pre-delivery arrangements (e.g. recruiting local partners and volunteers, and arranging training). SCUUK will be the main point of contact for schools regarding preparations and delivery, and for all FAST target work with schools and parents. NFER will be the main point of contact with schools for mid- and end-point school-level and year-group data. It is important that SCUUK's involvement in evaluation data collection is limited, to avoid bias.

NFER, with support from SCUUK, will collect *FASTworks* data, from a nominated local partner who is willing to complete ongoing records.

Control schools

NFER will inform schools that are allocated to the control group, after each randomisation. NFER will be the main point of contact with control schools, for mid- and end-point school-level and year-group data collection. NFER will need to advise SCUUK when control schools have completed their mid- and end-point data (SDQs, school pro-formas), for payment from SCUUK. Control schools will receive £500 on completion of mid-point data, and a further £1,000 on completion of end-point data.

Reporting and timeline

This trial will start in May 2015 and will run until Nov 2017. NFER will provide bi-annual reports to EEF.

Month	Activity (Block 1; Block 2; Block 3)
Apr-May 2015	<p>Write and agree protocol</p> <p>Recruitment workshop</p> <p>School recruitment starts</p>
May 2015	<p>Block 1 recruitment (SCUK)</p> <p>School Agreements (block 1a in place) (SCUK) (22nd May)</p>
June 2015	<p>Block 1a baseline data collection window: pro-forma, parent opt-out UPN lists, baseline SDQ administered (for all Reception children, intervention and control) (block 1a) (25th May – 19th June)</p> <p>Randomisation (block 1a – North and South) (22nd June)</p> <p>Communicate results to schools and to SCUK (23rd June)</p> <p>FAST phase 1 pre-delivery arrangements start (SCUK recruit partners, arrange training) (Block 1a)</p> <p>School Agreements (block 1b in place) (SCUK) (18th June)</p>
July 2015	<p>Block 1b baseline data collection window: (22nd June – 10th July)</p> <p>Randomisation (block 1b – North and South) (13th July); communicate results to schools and to SCUK (14th July)</p> <p>FAST phase 1 pre-delivery arrangements continue (SCUK) (Block 1a and 1b)</p>
Sept 2015	<p>Observe FAST phase 1 training (block 1)</p> <p>FAST parents being engaged in the programme (block 1)</p> <p>Week 0 FAST questionnaire (Middlesex) (block 1)</p> <p>Block 2 recruitment ongoing</p>
Oct 2015	<p>FAST phase 2 eight-week programme starts (block 1)</p> <p>Case study observations in weeks 4–8 (block 1)</p> <p>School Agreements (block 2 in place) (SCUK) (2nd Oct)</p>
Nov 2015	<p>Case study observations in weeks 4–8 cont'd (block 1)</p> <p>Week 9 interviews (block 1)</p> <p>Telephone interviews with each block 1 school (dates tbc)</p> <p>Block 2 baseline data collection window:(pro-forma, parent opt-out, UPNs, baseline SDQ) (5th Oct – 6th November)</p> <p>Randomisation (block 2 North and South) (9th Nov); communicate results to schools and to SCUK (10th Nov)</p>
Dec 2015	<p>Case study observations in weeks 4–8 cont'd (block 1)</p> <p>Block 1 Week 9 interviews cont'd</p> <p>Post-programme FAST questionnaire (Middlesex) (block 1)</p>

Month	Activity (Block 1; Block 2; Block 3)
	<p>FAST phase 1 pre-delivery arrangements (block 2)</p> <p>Block 3a recruitment (school agreements in place) (4th Dec 2015)</p> <p>Block 3a baseline data collection (pro-forma, parent opt-out, UPNs, baseline SDQ) (7th Dec – 15th Jan 2015)</p>
Jan 2016	<p>Post-programme SDQ administered (for all Y1s, intervention and control) block 1</p> <p>Collect FAST monitoring data (attendance logs) (block 1)</p> <p>FASTworks monitoring log in place for block 1</p> <p>Observe FAST phase 1 training (block 2)</p> <p>FAST parents being engaged in the programme (block 2)</p> <p>Week 0 FAST questionnaire (Middlesex) (block 2)</p> <p>Randomisation (block 3a) (18th Jan); communicate results to schools (19th Jan)</p> <p>Block 3b recruitment (school agreements in place) (29th Jan 2016)</p>
Feb 2016	<p>FAST phase 2 eight-week programme (block 2)</p> <p>Case study observations (block 2)</p> <p>Block 3b baseline data collection (pro-forma, parent opt-out, UPNs, baseline SDQ) (1st Feb – 4th March)</p>
Mar 2016	<p>Post-programme FAST questionnaire (Middlesex) (block 2)</p> <p>Telephone interviews with each block 2 school (date tbc)</p> <p>Randomisation (block 3b) (7th March); communicate results to schools (8th March)</p> <p>FAST phase 1 partners being recruited (block 3)</p>
April 2016	<p>Week 9 interviews (block 2)</p> <p>Post-programme SDQ administered (for all Y1s, intervention and control) block 2)</p> <p>Collect FAST monitoring data (attendance logs) (block 2)</p> <p>FastWorks monitoring log in place for block 2</p> <p>Observe FAST phase 1 training (block 3)</p> <p>FAST parents being engaged in the programme (block 3)</p> <p>Week 0 FAST questionnaire (Middlesex) (block 3)</p>
May-June 2016	<p>FAST phase 2 eight-week programme (block 3)</p> <p>Case study observations (block 3)</p>
July 2016	<p>Week 9 interviews (block 3)</p> <p>Post-programme SDQ administered (for all Y1s, intervention and control) (block 3) (June – July)</p> <p>Post-programme FAST questionnaire (Middlesex) (block 3)</p> <p>Telephone interviews with each block 3 school (date tbc)</p> <p>Collect FAST monitoring data (attendance logs) (block 3)</p> <p>FASTworks monitoring log in place for block 3</p>
Sept 2016 – July 2017	<p>Follow-up case study visits to each of the 10 case study schools, in relevant term one year on.</p>

Month	Activity (Block 1; Block 2; Block 3)
May 2017	Key Stage 1 testing SDQ follow-up
June 2017	Test marking and data capture Collect <i>FASTworks</i> monitoring logs and brief open-ended questions
July 2017	Collect school follow-up school pro-formas
August 2017	Data analysis
Sept –Dec 2017	Drafting and finalising report

Personnel, roles and responsibilities

The principle investigator will be **Dr. Ben Styles**, Research Director and Head of NFER’s Education Trials Unit. Ben will direct the trial at NFER. **Pippa Lord**, Senior Research Manager at NFER, will lead and manage the trial on a day-to-day basis, act as daily contact with SCUK/FAST, and with EEF, and oversee the process evaluation. NFER’s Research and Product Operations department will oversee the administration of KS1 tests and the SDQ. Partners from The Centre for Child and Family Research (CCFR), Loughborough University will work on the FAST programme evaluation with NFER. **Lisa Holmes**, Director of CCFR and **Rebecca Brown**, Senior Research Associate at CCFR will particularly assist with the secondary outcomes collection and analyses, and the process evaluation.

Risks

Risk	Assessment	Countermeasures and contingencies
Insufficient schools recruited to the study	Likelihood: moderate Impact: high	Save the Children will employ their usual FAST recruitment activities, with additional processes in place for recruiting to a trial. SCUK and NFER will hold a recruitment workshop with FAST personnel. NFER can employ blocked randomisation if the trial needs to be run in phases to achieve sample size required
School or pupil attrition	Likelihood: moderate Impact: moderate	Clear information and initial SCUK meeting with schools explaining the principles of the trial and expectations. Key Stage 1 is a statutory assessment.
Incomplete data from schools	Likelihood: low Impact: moderate	Schools’ partnership agreements set 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. SCUK will support NFER with encouraging schools to complete data.
Intervention is not implemented well	Likelihood: low Impact: moderate	<ul style="list-style-type: none"> Clear information and initial SCUK meeting with schools explaining the principles of the trial and expectations. Both ‘intention to treat’ and ‘on-

Risk	Assessment	Countermeasures and contingencies
Control group adopts similar treatments (contamination issues)	Likelihood: low Impact: moderate	treatment' analysis will be used. Process evaluation will monitor implementation. Control schools will not be allowed to access FAST until after the trial is complete.
Researchers lost to project due to sickness, absence or staff turnover	Likelihood: moderate over 3 years Impact: moderate	NFER has a large research department with numerous researchers experienced in evaluation who could be redeployed. CCFR also have a pool of researchers from which to draw.

FAST
NFER
Ben Styles



