School incentive payments for mentor engagement in training
Evaluation Protocol

Evaluator (institution): NFER
Principal investigator(s): Dr Ben Styles

PROJECT TITLE	School incentive payments for mentor engagement in training: A nimble randomised controlled trial
DEVELOPER (INSTITUTION)	Ambition Institute and Teach First
EVALUATOR (INSTITUTION)	National Foundation for Educational Research
PRINCIPAL INVESTIGATOR(S)	Dr Ben Styles
PROTOCOL AUTHOR(S)	Dr Ben Styles, Sarah Tang
TRIAL DESIGN	Two-arm cluster nimble randomised controlled trial with random allocation at school level
TRIAL TYPE	Nimble
PUPIL AGE RANGE AND KEY STAGE	All primary and secondary age pupils
NUMBER OF SCHOOLS	c. 350
NUMBER OF PUPILS	n/a
PRIMARY OUTCOME MEASURE AND SOURCE	Time spent engaged in mentor training activities
SECONDARY OUTCOME MEASURE AND SOURCE	Mentor retention in the programme

Protocol version history

VERSION	DATE	REASON FOR REVISION
1.1		
1.0 [*original*]	19/11/2020	N/A

Table of contents

Study rationale and background

The NFER has been commissioned by EEF to evaluate the early roll-out of the Full Induction Programme (FIP) for early career teachers and their mentors, which is underpinned by the Early Career Framework (ECF)[1]. As part of this, NFER is running a nimble randomised controlled trial (RCT). The purpose of the RCT is to evaluate the impact of an incentive payment to schools (intended to cover the costs of staff training time) on mentors' engagement in the programme, specifically in their training. The Early Career Framework (ECF) will underpin a step change in support for early career teachers, providing an entitlement to a structured two-year package of high-quality professional development. The framework is part of the Government's teacher recruitment and retention strategy, which aims to increase the resources and opportunities open to teaching professionals, alongside the number of those in the profession.

To support the ECF, the Department for Education (DfE) has commissioned four providers to develop and deliver a Full Induction Programme (FIP) for early career teachers and their in-school mentors. Three areas – Greater Manchester, North East, and Doncaster and Bradford – are part of an early roll-out (commencing autumn 2020) ahead of National Roll-Out in September 2021. This trial will involve in-school mentors enrolled with two (of the four) providers – Teach First and Ambition Institute. It was agreed, when designing the trial, that working with a smaller number of providers would be more practical and efficient. Running the trial with one provider would not have delivered a large enough sample to detect a small enough Minimum Detectable Effect Size (MDES). Ambition Institute and Teach First were closer to their recruitment target when the trial was being set up and

---

[1] https://www.gov.uk/government/collections/early-career-framework-reforms

were considered to have comprehensive online platforms likely to provide useful management information (MI) for the trial.

Given the key role that in-school mentors will play in offering early career support, Ministers and unions have asked how best to secure mentor engagement in the Full Induction Programme (FIP). The DfE and EEF would like to examine the potential impact of using financial incentives on increasing engagement of mentors in the training element of the FIP.

Intervention

Mentors will share their expertise with early career teachers to help them to develop and feel prepared for their future careers. Training and resources will be developed by the providers and based on the ECF. Mentors will have one early career teacher to mentor. Mentors will receive:

- 36 hours of training over the two-year induction period based on the ECF
- high-quality resources to support their mentoring
- funding to cover mentors' time with the mentee in the second year of teaching.

Ambition Institute's offer to mentors includes:

- Induction sessions. All mentors joining will be able to work through four hours of induction content and then they will have a 90-minute webinar on instructional coaching and delivery of practice.
- Coaching on coaching webinar sessions: two in Year 1, one in Y2

Teach First's offer to mentors includes:

- Online training (to develop skills in: assessing teacher progress, providing effective feedback, using deliberate practice to accelerate progress and how to provide further challenge to high performing ECTs). There are over 200 video exemplifications for mentors on the online platform.
- Webinars (delivered by Teach First Development Leads) to complement their NQTs' modules so they can tailor their support.
- Mentor group seminars - A one-hour session every half term to work with other mentors to develop their use of instructional coaching.

The incentive payment in this trial would be in addition to the funding received by the school for the programme. Nominally, it could be considered as covering the mentor's time off timetable to attend training. The additional incentive payment will be a one-off payment of around £775 per mentor (assuming they have a mentee) paid on a per school basis in the autumn term to cover the mentor's training time that academic year. This has been calculated based on 18 hours of training per year. It is hypothesised that a payment to cover each mentor's time will incentivise the school to prioritise the mentor attending their training sessions. The incentive payment is separate from any funding received as part of the early roll-out of the ECF and will be paid by the DfE directly to schools during the autumn term.

Financial support is already available for mentors to have a reduced teaching timetable as part of the FIP in order to enable them to work with their early career teachers. The mentor training takes place over the two-year programme but is frontloaded in the first year. The trial will measure engagement in training over the first year of the programme.

Impact evaluation

Research questions

Primary research question

RQ1   What is the effect of financial payments to schools participating in the early roll-out of the ECF on the level of mentor engagement in training as measured by the time spent engaged in training?

Secondary research questions

RQ2   What is the effect of financial payments to schools on the retention of mentors in the programme as measured at the end of each term?

Design

This trial is envisaged to be nimble i.e. testing a specific aspect of implementation (in this case supporting the mentoring process through the use of an incentive). In nimble RCTs, the outcome is an implementation measure only i.e. one that can be measured easily and yet still captures an aspect that is deemed critical to achieving desired outcomes downstream (in this case, teacher retention). To be practical, we will use engagement data from the providers' management information (MI), specifically looking at mentor attendance at training seminars, coaching and time spent working on/reading online support materials

Table 1: Trial design

Trial design, including number of arms		Two-arm, cluster randomised
Unit of randomisation		School
Stratification variables (if applicable)		Provider
Primary outcome	variable	Time spent engaged in mentor training activities
	measure (instrument, scale, source)	Bespoke measure calculated by attendance at seminars, coaching sessions and time spent accessing materials on the providers' online platforms, source: providers' MI systems
Secondary outcome(s)	variable(s)	Mentor dropout from programme
	measure(s) (instrument, scale, source)	Proportion of schools with all mentors still on the programme at the end of each term
Baseline for primary outcome	**variable**	None
	measure (instrument, scale, source)	
Baseline for secondary outcome	**variable**	None
	measure (instrument, scale, source)	

Randomisation

Randomisation will take place at school level as the incentives are paid directly to schools. It will be stratified by provider to guarantee that half the schools in each provider receive the incentive. Randomisation will be carried out using R and code will be appended to the report. Analysts will not be blind to group allocation.

This trial will focus on early roll-out participants, i.e. mentors in the schools that have opted into the early roll-out of the FIP in Greater Manchester, North East, Doncaster and Bradford from September 2020. This is the model that will be rolled out nationally from September 2021. In autumn 2020, the Government will also be introducing a one-year programme across the country, to support teachers that have had their Initial Teacher Training (ITT) curtailed due to Covid-19. Participants on this one-off shorter programme will not be included in the trial.

There are four providers of the FIP in the early roll-out. Due to the timelines involved, it was decided that it would be more straightforward to work with a smaller number of providers. After initial conversations with DfE and some providers, it was agreed that two providers were necessary to provide a large enough number of schools to detect an appropriate minimum detectable effect size (see later section on MDES). Ambition Institute and Teach First were closer to their recruitment targets and both have developed online platforms that capture management information that could be used for the trial. Participation in the school incentive payments trial is open to any school taking part in the early roll-out of the FIP with either Ambition Institute or Teach First as their provider of the programme and have at least one mentor/early career teacher pairing starting the FIP in autumn term 2020. Both primary and secondary schools will be included in the trial.

Recruitment of schools to the early roll-out was already underway when the trial was designed so the incentive trial could not be communicated up front. Instead, we will e-mail a letter to all schools recruited to take part in the early roll-out with Ambition Institute and Teach First and invite them to participate in a trial of school incentive payments. Phone calls will then be made to follow up with any schools that have not responded. Contact details of a senior member of staff for all schools on the programme will be provided to NFER by the delivery providers in order to facilitate recruitment. Separate data portals will be set up between each provider and NFER to allow secure transfer of personal data such as names and contact details of school contacts, and names of mentors (see data protection section).

Half the recruited schools will receive the incentive payment for their mentors. The total incentive will be £775 multiplied by number of mentors in school (where the mentor has an early career teacher). The remaining schools will act as a control. We believe a reasonable number of schools will sign up to this as it could be done simply by filling in a short online form and represents the opportunity to secure extra funds with no additional data burden.

Covert randomisation (i.e. randomisation to payment without opt-in consent) was considered here but is likely to lead to 'resentful demoralisation' if control schools discover they have missed out on payment. A waitlist design is likely to influence control behaviour as they will ultimately receive the payment.

Incentives

In order to ensure that the model is replicable at scale in any future national roll-out, a single one-off payment will be made in the autumn term of year one of the programme. Payments will be administered to schools directly by the DfE. One challenge is that a significant proportion of the early roll-out schools are part of Multi-Academy Trusts (MATs). Payments to any schools within MATs will be made to the MAT rather than directly to the school. Depending on how centrally budgets are managed in the individual MAT this may dilute the potential effect of the payment. The implications of this will be considered in the initial recruitment to the trial as well as in the write up. We will monitor which schools are part of a MAT by asking this at sign-up and will be explicit when notifying schools of the randomisation result that the incentive payment is intended for a particular school in their MAT.

Sample size calculations

Table 2: Sample size calculations

		OVERALL
Minimum Detectable Effect Size (MDES)		0.33
Pre-test/ post-test correlations	level 1 (pupil)	
	level 2 (class)	
	level 3 (school)	
Intracluster correlations (ICCs)	level 2 (class)	
	level 3 (school)	
Alpha[2]		0.05
Power		0.8
One-sided or two-sided?		2
Average cluster size		1
Number of schools[3]	Intervention	150
	Control	150
	Total	300
Number of mentors*	Intervention	150
	Control	150
	Total	300

Note: * The number of mentors per school is assumed to be 1 here. This number will be larger than 1 but the mean average of the measure for each school will be used.

As outlined above, given the timelines necessary to be able to set this trial in time for delivery in early autumn, it is appropriate to work with a smaller number of providers. Initially working with one provider was explored but it became clear that this would not provide a larger enough sample. While each provider is aiming to recruit approximately 600 early career teachers and their mentors to start on the programme, some will be located in the same schools. As the financial incentives will be paid to schools, randomisation will take place at the school level rather than the mentor level. Initial conversations with providers suggest that each provider will recruit around 200 schools.

Any changes in implementation must have a larger effect size than that desired in the more important downstream outcome of interest (in this case ECT retention) and therefore require a smaller sample size to detect. Working with two providers in the RCT means around 400 schools will be approached to take part in the trial. Four hundred schools, randomised equally, would be powered to detect an effect size of 0.28. Of course, not all schools are going to sign up so a more realistic figure may be 300 schools taking part in the trial which would be powered to detect an effect size of 0.33.

Power calculations were completed using a bespoke Excel spreadsheet.

Outcome measures[4]

After initial discussions with both Ambition Institute and Teach First, it became clear that both platforms collect data on a range of measures that could be used as a proxy for mentor engagement.

Primary outcome

---

[2] Please adjust as necessary for trials with multiple primary outcomes, 3-arm trials, etc., when a Bonferroni correction is used to account for family-wise errors.
[3] Please adjust as necessary, e.g., for trials that are randomised at the class level.
[4] Please see the Statistical Analysis Guidance.

As the payment is designed to incentivise mentor participation in training, the time spent engaged in mentor training will be the primary outcome measure. This measure will be a calculated using MI from providers' customer relationship management (CRM) systems on attendance at the training seminars, coaching sessions and a measure of time spent on online training materials. Data on engagement in training across the different types of provision (live seminars, coaching and online self-study) will be collected termly from the providers. Combining attendance data with data from providers on the length of training sessions, a measure of the length of time a mentor engaged with the training will be estimated. This will be a continuous measure and any differences will be measured across treatment and control groups.

Care will be taken when deciding the measure of time spent engaged in the online training materials as in the pilot study for this programme the authors noted that they suspect a 'dormant time effect' suggesting not all time logged to the material was spent actively working on it. Further detail on this will follow in the SAP.

Secondary outcomes
The secondary outcome will be the retention of mentors in the programme as measured at the end of each term. We will look at two binary measures at the end of each term. Firstly, whether or not all the mentors were still in the programme and second whether or not there is any dropout from the mentors in a school.

Analysis

The main analysis for this trial will follow an intention to treat approach and will follow EEF guidelines[5]. Using an intention to treat approach means that all mentors in the trial (i.e. all the mentors in schools which initially signed up to the trial selected by their teachers for tutoring) will be included in the analysis. The only exception to this would be where data is not available, due to consent withdrawn by the mentor or the data is not available from the provider. Due to the small numbers of mentors per school, we will analyse mean time spent engaged in training per school using a single-level regression and will compare levels of training attendance across intervention and control arms. Hedges g will be calculated according to EEF guidelines. Ninety-five per cent confidence intervals will be computed for each effect size. More detail on the analysis will follow in the SAP.

Longitudinal follow-ups

We are not planning any longitudinal follow-up for this trial. There could, however, be a follow-up data collection at the end of second year of the programme, which would allow for the longer-term effects in terms of retention on the programme of the incentive payments to be assessed although this is beyond the scope of the trial and is not included in this protocol.

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.

Ethical sign up to the evaluation is undertaken by a senior leader (the providers' main school contact) on behalf of the school and the teachers involved. The senior leader will be asked to send mentors a letter outlining the trial and the data collection involved as well as contact details to find out more information. Mentors will be informed of how they can withdraw themselves from the trial.

Data protection[6]

The legal basis for processing teacher data is covered by GDPR Article 6 (1) (f) which states:

> Legitimate interests: the processing is necessary for your (or a third party's) legitimate interests unless there is a good reason to protect the individual's personal data which overrides those legitimate interests.

We have carried out a legitimate interest assessment, which demonstrates that the evaluation fulfils one of NFER's core business purposes (undertaking research, evaluation and information activities) and will not cause damage or distress to the data subjects. It has broader societal benefits as it will help us understand the role of incentive payments to schools to support engagement in mentor training. Improving mentor engagement potentially has an important role in improving the support provided to early career teachers in their first two years teaching.

NFER is collecting data via the providers to enable the evaluation of school incentive payments to schools. NFER and the providers are joint data controllers for the data used for the trial.

Providers are collecting personal data when they recruit schools, mentors and early careers teachers to take part in the early roll-out of the ECF. Providers will share personal data with NFER in order to enable NFER to recruit schools to take part in the trial. Management Information will be collected as part of the monitoring and evaluation activities for the DfE – details of which can be found in individual providers' privacy notice for ECF. Some of this data will be shared with NFER in order to assess the impact of the incentive payment to schools on mentor engagement.

NFER will share data (school names,URN and contact email address) with DfE detailing which schools have been randomised to receive the incentive payments so that DfE can administer the payments. All personal data will be shared via a secure online portal. For more information see the trial webpage: https://www.nfer.ac.uk/for-schools/participate-in-research/evaluation-of-school-incentive-payments-for-mentor-training/.

Personnel

Name	Institution	Project role	Project responsibilities
Ben Styles	NFER	Trial Director	Leading the NFER team and overseeing impact design and project delivery
Sarah Tang	NFER	Trial Manager	Managing the day to day running of the evaluation
Kathryn Hurd	NFER	Operations Lead	Overseeing recruitment, communications with schools
Priscilla Antwi	NFER	Operations Manager	Managing day to day recruitment, communication and data collection
Joana Andrade	NFER	Statistician	Undertaking statistical analysis
Rob Green	NFER	Data manager	Checking, cleaning and matching data from providers and schools
Aisling Cregan	Ambition Institute	Senior Associate, Research & Evaluation	
Hannah Blausten	Ambition Institute	Associate Dean, Programme Leader	

---

[6] Please see the Data Protection Statement for EEF Evaluations.

Melissa Thomlinson	Ambition Institute	Associate Dean
Emma Arnesson	Teach First	Contracts Manager
Simon Quick	Teach First	Programme Manager

Risks

Risk	Assessment	Controls, countermeasures and contingencies
Insufficient schools recruited to the trial	**Likelihood:** low **Impact:** high	NFER has made sign up as easy as possible and follow-up phone calls will be made to chase non-responders
School attrition	**Likelihood:** low **Impact:** moderate/high	As there a low likelihood of school attrition as there is no extra data burden on schools. Once schools have signed up to the trial all data collected is via the providers' MI.
High rate of mentor withdrawal for either the trial or the intervention itself	**Likelihood:** low **Impact:** moderate	Mentors are made aware of the trial at during sign-up stage via the privacy notice and the school information sheet. Withdrawal from the programme does not mean that mentors are automatically withdrawn from the trial unless the mentor requests to be excluded. There is no additional data burden on the mentor on top of what is required for the programme itself.
Poor quality data from providers	**Likelihood:** low **Impact:** high	A data specification will be drawn up with providers in the autumn term, detailing data requirements and timetable for data sharing.
Lack of engagement with providers	**Likelihood:** low **Impact:** moderate/high	Clear information provided to schools explaining the principles of the trial and expectations. Good communication with delivery team to provide strong implementation. Process evaluation will monitor implementation.
Delay in payments to schools	**Likelihood:** moderate **Impact:** moderate	NFER to ensure that DfE are aware of the timeline regarding payments. NFER to notify DfE of the schools due to receive the payments promptly once schools themselves have been made aware of the randomisation result.
Dilution of incentive payments due to MAT structures	**Likelihood:** moderate **Impact:** moderate	A substantial proportion of the schools are part of Multi-Academy Trusts some of which may have a centralised financial structure. This may mean that incentives targeted at particular schools are diluted. We will monitor this during sign up to the trial. We will be explicit when notifying schools that they have been randomised to receive the incentive that is it for mentors in a certain school/schools.
Changes to the project team due to sickness, absence or staff turnover	**Likelihood:** moderate **Impact:** moderate	NFER has a large research department with numerous researchers and research associates experienced in evaluation who could be redeployed. Clear and accurate project documentation would support continuity in the event of any team changes.

Timeline

It will be useful to get initial results early on in the programme for the purposes of informing future planning and policy. Requiring rapid sign up via a web link will ensure randomisation and payment can take place as soon as possible in the autumn term. Engagement measures from the MI can be

monitored according to the length of time over which they are collected. This means that it will be possible to report on early engagement activity in January 2021. We will collect engagement data termly, providing a brief update report in the New Year on initial findings from the first term. It will be interesting to see if any initial effect of the payments attenuates over time. The trial will run for one year as most of the mentor training takes place in this first year.

Table 4: Timeline

Dates	Activity	Staff responsible/ leading
14th Sept 2020	Confirm access to school contact details	AI/TF
15th Sept 2020	NFER quote and budget to EEF	NFER
23rd Sept 2020	Ethics approval Draft recruitment letter, info sheet, privacy notices and data sharing agreement sent to DfE, EEF, Ambition, TF	NFER
w/c 28th Sept 2020	Finalise all documents	All
w/c 5th Oct	Providers send school contacts to NFER Submission of draft protocol	AI/TF
w/c 5th Oct	Recruitment starts (2 weeks)	NFER
w/c 26th Oct	Randomisation	NFER
w/c 2nd Nov	Notify schools of randomisation result Send list of randomised schools to DfE Finalise protocol	NFER
13th Nov	Submission of draft Statistical Analysis Plan	NFER
Dec 20/Jan 21	First data collection	NFER, AI, TF
Jan/Feb 21	Interim briefing	NFER
Mar/Apr 21	Second data collection	NFER, AI, TF
July 21	Final data collection	NFER, AI, TF
23rd Aug 21	Submission of draft report to the EEF	NFER
15th Nov 21	Submission of final report to the EEF	NFER