Early Career Teacher Support Pilots Study Plan



UCL Institute of Education
Centre for Teachers and Teaching Research

PROJECT TITLE	Early Career Teacher Support Pilots
DEVELOPER (INSTITUTION)	Ambition Institute and the Chartered College of Teaching
EVALUATOR (INSTITUTION)	UCL Institute of Education
PRINCIPAL INVESTIGATOR(S)	Mark Hardman
EVALUATION PLAN AUTHOR(S)	Mark Hardman, Becky Taylor, Caroline Daly, Polly Glegg, Beth Stiasny
PUPIL AGE RANGE AND KEY STAGE	5-18 year olds; Key Stages 1-5
NUMBER OF SCHOOLS/ SETTINGS	87 (Model A: 20 schools, Model B: 30 schools, Online model: 36 schools)
NUMBER OF MENTORS / MENTEES	256 mentors and 217 mentees

Introduction

This evaluation plan describes the design and methods being used to evaluate three pilot programmes for the support of Early Career Teachers (ECTs) through developing in-school mentoring as well as, in two cases, through direct support of ECTs. The evaluation will therefore provide further evidence around support for school mentors and ECTs, specifically in relation to the Early Career Framework (ECF) which will be rolled out nationally from September 2020. The ECF will specify approaches which ECTs should be familiar with, lengthen the induction period for newly qualified teachers (NQTs) to two years, and increase the entitlement of ECTs to support and training.

Mentor quality is crucial to ensuring that ECTs are well-supported. The pilots under evaluation offer models for the support and development of mentoring and ECTs. Two models have been developed by a team from Ambition Institute, namely:

- Model A Which provides intensive mentor training, resources and a coaching guide for mentors.
- Model B Which provides intensive mentor training, resources and a coaching guide for mentors, as well as resources and direct coaching to ECTs.

A further model of ECT support has been developed by a team at the Chartered College of Teaching:

• A fully online programme of training and support for both mentors and ECTs with some content also available for school leaders.

Pilots will take place over the 2019/20 academic year and will focus upon the first year of support for NQTs. The evaluation will be undertaken by a team from UCL Institute of Education [the evaluators] and will be a mixed methods implementation and process evaluation that aims for comparability of factors across the three pilots, whilst also evaluating the evidence of promise, feasibility and readiness for trial of each.

Pilots developed by Ambition Institute

The short provisional description that follows is based on the Template for Intervention Description and Replication (TIDieR) checklist, which should be read in conjunction with the provisional logic models (Figures 1a-1d).

1. Brief NAME

Early Career Support

2. WHY (RATIONALE/THEORY)

Little current professional development in schools is effective – perhaps only 1% leads to increased pupil achievement (CUREE, 2011). In particular, support to ECTs is variable (Hobson et al, 2009a; Hobson & Malderez, 2013; Maxwell et al, 2018; NFER, 2018). Any national roll-out of reforms, affecting over 50,000 ECTs and mentors annually, will therefore face a huge challenge offering consistently excellent support to ECTs.

This challenge is largely driven by a significant gap in the system's capacity to provide high-quality mentors, at two levels: the ability to coach ECTs effectively, and the understanding of good teaching.

Mentors who employ an effective model help ECTs to perform significantly better (Giebelhaus & Bowman, 2002) and meta-analysis supports instructional coaching as a promising model (Kraft et al., 2018); yet the current quality of mentoring approaches in schools is highly variable (Carter, 2015; Hobson et al, 2009a; NFER, 2018).
Mentors need a clear model of good teaching to support ECTs effectively (Feiman-Nemser, 2001; Ronfeldt, 2018) – particularly given the emphasis in the ECF on evidence-informed teaching practices. Whilst the ECF provides a clear frame for knowledge of teaching, we know that the extent to which teachers hold this knowledge is highly variable. For example, teachers in England do not always have a strong grasp of assessment approaches (Millard et al, 2017), subject-specific strategies (Brown et al, 2016; Hodgson, 2014), or more general pedagogical approaches (Dekker et al, 2012; Howard-Jones, 2014; McNamara et al, 2017). Whilst those

chosen to be mentors may have stronger knowledge of teaching practices than other teachers, this cannot be assumed. The pilot programmes therefore support development of mentor and ECT knowledge in ECF areas.

3. WHO (RECIPIENTS)

Model A:

- > Induction Leads in schools (ages 5-18), and alternative provision settings in England.
- Mentors of ECTs starting their NQT year in September 2019.

Model B:

- > Induction Leads.
- > Mentors of ECTs starting their NQT year in September 2019.
- > ECTs starting their NQT year in September 2019.

4. WHAT (MATERIALS)

- Mentor: Detailed 'Coaching Guide': scaffolded weekly Instructional Coaching sessions
 - The coaching guide provides scripted weekly instructional coaching conversations aligned to a strand of the ECF. The guide helps to support mentors, regardless of their experience and expertise in both mentoring and teaching. It provides exemplification at each step of the coaching model to ensure clarity in mentor and to support understanding of the ECF content.
- Mentor: Asynchronous online videos
 - Online content will provide a suite of videos and accompanying resources to bring to life the knowledge needed to both understand the key components of the Early Career Framework and on the instructional coaching model itself. Mentors will have access to fundamental videos for each of the ECT's curriculum strands and specific steps of the instructional coaching model.

- > Model B only: ECT: Weekly online content exemplifying the most challenging areas of ECF with associated tasks.
 - Online content will include resources such as weekly videos which will set and model
 exemplar practice across a range of areas of teaching. They will communicate key
 research and literature that underpins what is being taught and provide regular, easily
 accessible, models that teachers can use on an ongoing basis.

Early Career Teachers:

Component	Detail
Component 1: Instructional coaching	Instructional coaching entails an expert teacher working alongside a novice within a personalised, classroom-based, observation-feedback-practice cycle. Done effectively, the same specific skills will be revisited multiple times, with the expert providing clear, easy to interpret feedback specifying both <i>what</i> and <i>how</i> the novice needs to improve. Its impact with novice learners especially has been documented. For the early career support programme, ECTs will benefit from clear and structured coaching which will move their practice on.
Component 2: Online Content including weekly videos	Online content including weekly videos will set and model exemplar practice across a range of areas of teaching. They will communicate key research and literature that underpins what's being taught and provide regular, easily accessible, models that teachers can use on an ongoing basis.
Component 3: Sense-Making Clinics	Sense-making clinics will enable ECTs to: re-iterate key content (e.g.: go over validity and reliability) check for understanding (e.g.: ask teachers to provide an example of how to make assessments more reliable) clarify misconceptions (e.g.: there is no such thing as a perfectly reliable test; summative assessments can happen frequently, you just likely can't make valid inferences from them)

Mentors:

Component	Detail
Component 1: Coaching on Coaching	Mentors will termly receive feedback on their instructional coaching of their ECTs. Mentors will film an instructional coaching conversation and then receive feedback and a structured conversation with the aim of providing feedback from an experienced coaching, addressing any misconceptions of the process and ensuring that time is given for reflection.
Component 2: Online content - Asynchronous videos	Online content will provide a suite of videos and accompanying resources to bring to life the knowledge needed to both understand the key components of the Early Career Framework and on the instructional coaching model itself. Mentors will have access to fundamental videos for each of the ECTs curriculum strands and specific steps of the instructional coaching model.
Component 3: Peer Learning Groups	Peer Learning Groups will enable mentors to: > Problem solve around common instructional coaching issues. > Clarify common misunderstandings about the Early Career Framework content. > Network with mentors from local school clusters.
Component 4: Face-to-Face	At the beginning of the programme, mentors will be invited for two days of face to face content that will provide them an overview of the programme, a better understanding of the Early Career Framework and an introduction to the instructional coaching model.

5. WHAT (PROCEDURES)

- > Facilitators are recruited from experienced pool of facilitators at Ambition Institute.
- > Induction Lead training:
 - At the beginning of the programme, Induction Leads will attend a half-day face to face conference which will provide them an overview of the programme and their role in supporting the programme to be successful. This will also include a high-level overview of Instructional Coaching.
- > Mentor training:
 - At the beginning of the programme, Mentors will attend two days of face to face content.
 Day one will provide them an overview of the ECF, and an overview of the early career
 support programme, including an introduction to the curriculum and guidance on their
 role within the pilot. Day two will be an introduction to the instructional coaching model
 and how this is deployed within the pilot programme.
- > ECTs receive either weekly or fortnightly (at the discretion of the school) Instructional Coaching from their Mentors.
- > Model B only: ECTs engage in weekly online content.
- > Model B only: ECTs attend facilitated 'Sense-Making Clinics' every three weeks.
- > Mentors attend facilitated 'Peer Learning Groups' each half term.
- > Mentors receive 'Coaching on Coaching' each term.
 - Mentors will termly receive feedback on their instructional coaching of their ECTs.
 Mentors will film an instructional coaching conversation. The conversation will be used in a structure conversation from an experienced coach, addressing any misconceptions of the process and ensuring that time is given for reflection.
 - Induction Leads will be encouraged to attend coaching on coaching sessions in order to better understand the coaching processes used by mentors.
 - *Model B only:* Induction Leads will deliver the final term's coaching on coaching session.
- > Induction Leads receive engagement data to support them with in-school follow up.

Model A: Delivery Components

When		What		Mode		Frequency		Who		Length
	>	Introduction to Programme & Role	>	Face to face	^	Conference	>	Induction Lead	>	Half Day
July	>	Early Career Framework	>	Face to face	^	Conference	>	Mentors	>	One-day
	>	Instructional Coaching	>	Face to face	^	Conference	>	Mentors	>	One-day
Autumn	>	Peer Learning Groups	>	Virtual	^	Half Termly	>	Mentors	>	1.5 Hrs
Term*	^	Coaching on Coaching	>	Virtual	۸	Termly	^	Induction Lead & Mentors	^	2.5 Hrs
Spring	>	Peer Learning Groups	>	Virtual	>	Half Termly	>	Mentors	>	1.5 Hrs
Term*	>	Coaching on Coaching	>	Virtual	^	Termly	>	Induction Lead & Mentors	>	2.5 Hrs
Summer	^	Peer Learning Groups	^	Virtual	^	Half Termly	^	Mentors	^	1.5 Hrs
Term*	>	Coaching on Coaching	>	Virtual	>	Termly	>	Induction Lead & Mentors	>	2.5 Hrs

Model B: Delivery Components

When	What	Mode	Frequency	Who	Length
	> Introduction to Programme & Role	> Face to face	> Conference	> Induction Lead	> Half Day
July	> Early Career Framework	> Face to face	> Conference	> Mentors	> One-day
	> Instructional Coaching	> Face to face	> Conference	> Mentors	> One-day
	> Peer Learning Groups	> Virtual	> Half Termly	> Mentors	> 1.5 Hrs
Autumn	> Coaching on Coaching	> Virtual	> Once	Induction Lead& Mentors	> 2.5 Hrs
Term*	> Online Content	> Virtual	> Weekly	> ECTs	> 10 Mins
	> Sense-Making Clinics	> Virtual	> 3 Weekly	> ECTs	> 1 Hr
	> Peer Learning Groups	> Virtual	> Half Termly	> Mentors	> 1.5 Hrs
Spring	> Coaching on Coaching	> Virtual	> Once	> Induction Lead & Mentors	> 2.5 Hrs
Term*	> Online Content	> Virtual	> Weekly	> ECTs	> 10 Mins
	> Sense-Making Clinics	> Virtual	> 3 Weekly	> ECTs	> 1 Hr
	> Peer Learning Groups	> Virtual	> Half Termly	> Mentors	> 1.5 Hrs
Summer	> Coaching on Coaching	> Virtual	> Once	Induction Lead& Mentors	> 2.5 Hrs
Term*	> Online Content	> Virtual	> Weekly	> ECTs	> 10 Mins
	> Sense-Making Clinics	> Virtual	> 3 Weekly	> ECTs	> 1 Hr

6. Who (IMPLEMENTERS)

- > The facilitated session (Induction, Peer Learning Groups and Sense-making Clinics) are delivered by expert facilitators in teacher education.
- > The same mentor should work with an ECT across the academic year.
- > Induction Leads will be invited to 'Coaching on Coaching' to develop their own skills as coaches, and so that they make over the 'coaching of coaches' role in supporting their mentors.

7. How (MODE OF DELIVERY)

> This ECT support programme will be conducted using a number of different components across one academic year. Initial conference days are face to face and then further components are virtual (online). See tables above.

8. WHERE (SETTING)

Mentors:

- > Induction Face to face delivery in regional clusters in England.
- > 'Peer Learning Groups' Virtual twilight sessions after school.
- > Online content: Asynchronous videos Virtual accessed independently.
- > 'Coaching on Coaching; Virtual during the school day or after school.

ECTs:

- > Instructional Coaching weekly or fortnightly in school.
- > Model B only: Online Content including weekly videos Virtual accessed independently.
- > Model B only: 'Sense Making Clinics' Virtual twilight sessions after school.

9. WHEN AND HOW MUCH (DOSAGE)

- > The programme includes three terms of sequenced content that an ECT will work through along with an underpinning strand on self-regulation, which features within core programme activities, within each strand and within reflection on the programme.
- > Each term, they will focus on a strand within one of the following content areas:
 - Content Area 1: Curriculum
 - Content Area 2: Assessment
 - Content Area 3: Instruction
 - Content Area 4: Behaviour
- > Each content area has three strands which are designed to ensure that the ECT's mental model develops and sustained focus on classroom practice occurs. They are:

Assessment 1	Instruction 1	Behaviour 1	Curriculum 1
Assessment 2	Instruction 2	Behaviour 2	Curriculum 2
Assessment 3	Instruction 3	Behaviour3	Curriculum 3

- > The strands are delivered to the ECT through weekly or fortnightly Instructional Coaching from the mentors, resourced with a coaching handbook which guides focus and gives exemplar action steps.
- > Additional support is provided for mentors through optional online content to support knowledge development where needed.
- > Intentions:
 - ECT will remain on a strand for the duration of the term.
 - They are to be completed in order (start with 1).
 - It is not assumed a teacher will necessarily focus on one area for the whole year (while a teacher might do Assessment 1, Assessment 2 and Assessment 3, they equally might do Assessment 1, Behaviour 1, Curriculum 1 or Assessment 1, Assessment 2, Curriculum 1).
- > *Model B only*: Online content for ECTs will include a range of video, narrated presentation, reading and associated tasks delivered through a virtual platform.

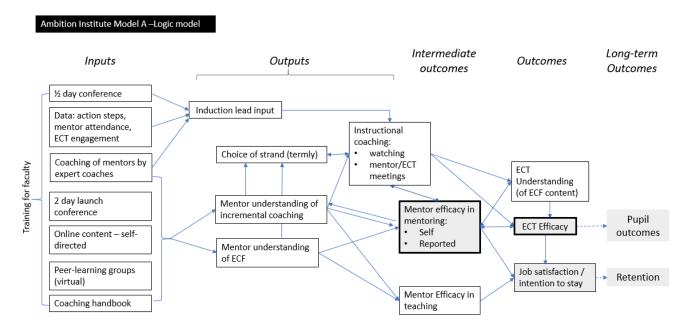
10. TAILORING

- Mentors will select a strand each term for their Early Career Teacher. This should be influenced by knowledge gained from areas such as the NQT Action Plan, observation of their classroom teaching, conversations with the NQT and mentor reflection on guided questions.
- > Mentors are able to change the focus on the first term within the first 2-3 weeks as it is understandable that a full picture on the needs of the early career teacher might not be defined.
- > This strand will highly scaffold the selection of action steps. Each week mentors will be given an area of focus (for example, they might focus on lesson objectives, hinge questions, or underload depending on the strand and/or week) with pre-populated action steps which they can choose to use, adapt or replace.
- > As mentors grow in competence to deliver the coaching model with fidelity, as well as diagnose the highest leverage area of need, they will be able to set their own action steps separate from the pre-populated list.

11. How well (Planned)

- > Effective implementation requires training mentors in all pilot schools before they deliver Instructional Coaching. This conference training for mentors will consist of models, practice, and feedback.
- > Effective implementation will require support from the Induction Lead to ensure that instructional coaching sessions are scheduled and supported within the school week.

Figure 1a - Logic Model for Ambition Institute Model A Pilot



[please note that 'faculty' refers to Ambition Institute staff]

Figure 1b - Logic Model for Ambition Institute Model A Pilot, also showing moderators

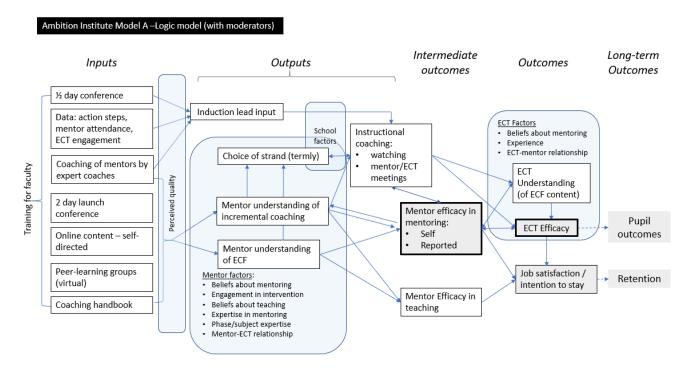
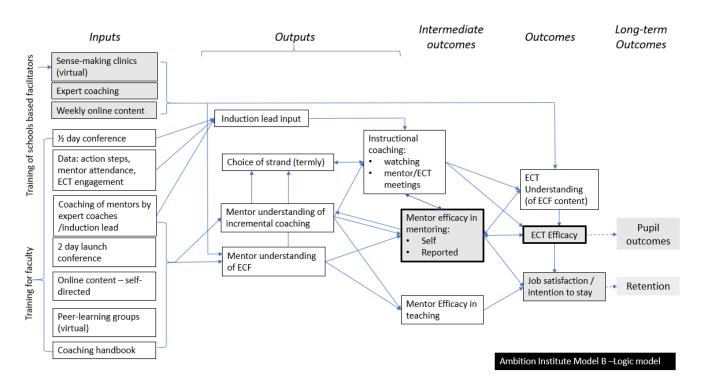
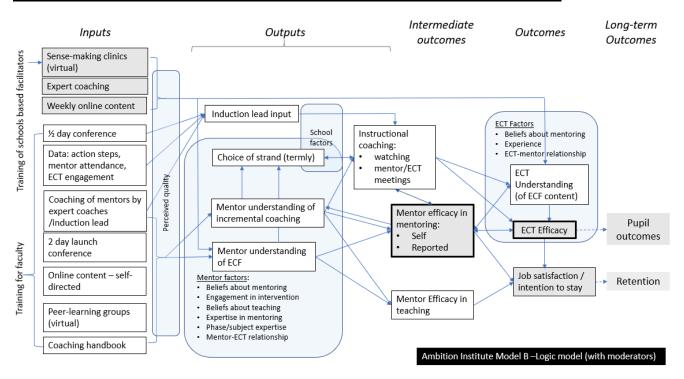


Figure 1c - Logic Model for Ambition Institute Model B Pilot



[Please note that 'school based facilitators' are experienced teachers who will be trained by Ambition Institute to deliver aspects of the programme]

Figure 1d - Logic Model for Ambition Institute Model B Pilot, also showing moderators



These logic models were agreed with Ambition Institute in June 2019. This is an evaluation of a pilot and it is anticipated that the logic model will be modified during the evaluation as a result of ongoing evaluation by Ambition Institute, schools and participants, and through initial evaluation feedback to be produced by the evaluators in spring 2020.

Pilot developed by the Chartered College for Teaching

The short provisional description that follows is based on the Template for Intervention Description and Replication (TIDieR) checklist, which should be read in conjunction with the provisional logic models (Figures 2a and 2b).

1. Brief NAME

Early Career Support: online teacher development

2. WHY (RATIONALE/THEORY)

We know that retention of our teachers is one of the biggest challenges our profession faces, with those teachers in the first two years of their career most likely to describe their workload as unmanageable. If teaching is to be seen as a world class profession, our teachers need access to support as soon as they enter the classroom. The release of the ECF seeks to address this challenge. In-school mentors, coaches and Continuing Professional Development (CPD) leads will play a key role in the success of the ECF, but funding pressures and capacity challenges in schools mean that the high quality support NQTs need currently varies (Department for Education, 2018). This pilot will provide coaches / mentors with the greatest level of support for their knowledge around the content of the ECF as well as instructional coaching skills' development. This pilot is delivered online to ensure scalability, consistency and long-term cost-effectiveness, whilst taking advantage of the affordances and scalability of digital technology.

3. WHO (RECIPIENTS)

NQTs, their mentors and school leaders across a range of primary and secondary settings in England.

4. WHAT (MATERIALS)

NQTs and their mentors will access a range of resources in a structured online course to support a model of instructional coaching in their mentor meetings and observations. Live webinars will supplement individual study of video and written content, and participants will be allocated to groups for peer activities, feedback and discussion facilitated by a course tutor. The course will be completed online across six modules (with one preparatory module for mentors and school leaders).

5. WHAT (PROCEDURES)

Mentors will access an online preparatory module to prepare them for the year-long pilot with materials to introduce the instructional coaching model they will use with their mentees and guidance for making the most of learning online. Mentors will then access modules 1-6 ahead of their mentees between September and July to engage with the learning content for an hour each week, interact with fellow mentors, and plan for mentor meetings and observations, which will typically take place at least fortnightly with two 30 minute coaching observations half-termly.

NQTs will access modules of ECF online learning content between September and July for an hour each week, discuss it with fellow NQTs and reflect on it to prepare for meetings and observations with their mentor.

School leaders will access an online preparatory module from June to prepare them for supporting their school's professional learning culture so that it supports effective mentoring. They will be able to view the content of modules 1-6 and a variety of options will be made available for providing access to this learning for other teachers in their school, including RQTs.

All online learning content will be developed and facilitated by Chartered College of Teaching staff who will monitor engagement with the content, provide feedback, and communicate activity details throughout the programme.

6. Who (IMPLEMENTERS)

Chartered College of Teaching staff will design and facilitate the online learning for all participating senior leaders, NQTs and mentors. Mentors will support the learning of their NQTs through the use of an instructional coaching model. The school's nominated leaders will enable the intervention by providing the conditions for professional learning to take place.

7. How (MODE OF DELIVERY)

A year-long online programme.

Plus at least fortnightly meetings between mentors and their NQTs and two half-termly 30 minute observations using an instructional coaching model.

8. WHERE (SETTING)

On a Chartered College of Teaching online platform, where possible enabled during school time, and face-to-face in regular mentor meetings and observations.

9. WHEN AND HOW MUCH (DOSAGE)

The online learning will be available to mentors between June 2019 and July 2020, and to NQTs between September 2019 and July 2020. There will be around 1 hour of learning content to engage with each week. Where possible this will take place during school time. This will be supported by a model of instructional coaching which will take place between the NQT and their mentor through at least fortnightly meetings and two 30 minute coaching observations half-termly.

10. TAILORING

Additional learning materials and separate discussion spaces will be provided for a group of key stage one and a group of secondary English NQTs and their mentors. School leaders will have access to the six modules to tailor the content for other staff in the school for wider CPD as they wish. All of the six modules will provide a number of individual reflection activities so that learning can be continually applied to each teacher's context and needs.

11. How well (Planned)

Effective implementation requires support from school leaders to provide the time and space, within directed time, for the online learning and mentoring to take place. The preparatory module provides ways in which this can be achieved as well as broader ideas about professional learning cultures that can support NQTs. Effective implementation requires mentors to use the instructional coaching model with their NQTs in meetings and observations. They will be introduced to the model in the preparatory module and each of the programme's six modules will contain further guidance and practice opportunities. Effective implementation requires engagement from all parties. The online tutor and / or project lead, as appropriate, will proactively communicate with participants, mentors and school leaders to enable engagement with the programme. There will be additional reporting procedures where concerns over engagement are identified through system analytics or other contact.

Figure 2a - Logic Model for the Chartered College of Teaching pilot.

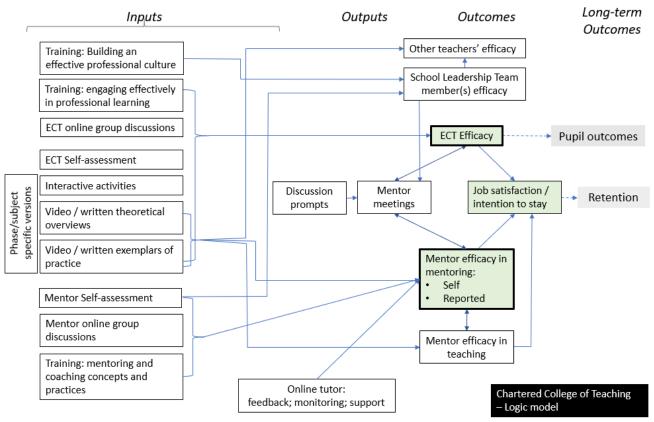
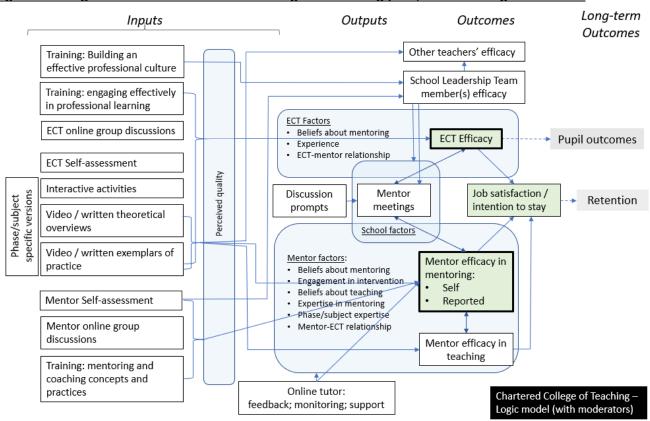


Figure 2b- Logic Model for the Chartered College of Teaching pilot, also showing moderators



These logic models were agreed with the Chartered College of Teaching in June 2019. This is an evaluation of a pilot and it is anticipated that the logic model will be modified during the evaluation as a result of ongoing evaluation by the Chartered College of Teaching, schools and participants, and through initial evaluation feedback to be produced by the evaluators in spring 2020.

Research questions

As this evaluation is of pilot studies, it focuses upon salient dimensions as indicated in Humphrey et al's (2016) "Implementation and process evaluation (IPE) for interventions in education settings, namely evidence of promise, feasibility and readiness for trial. The purpose of this evaluation is therefore to provide feedback upon the approaches to supporting mentoring of ECTs, both in order to develop and inform further trials in the future, but also to provide immediate feedback to schools and policy-makers at a time when support of ECTs is being closely considered. To this end, we will consider initial findings after just one term of intervention, before publishing the final report in July 2020.

After discussion with Ambition Institute, the Chartered College of Teaching and EEF, we have derived the following specific research questions for each pilot intervention, relating to the above dimensions of interest:

EVIDENCE OF PROMISE

- 1) How does the intervention influence ECT efficacy?
- 2) How does the intervention influence mentor efficacy/quality?
- 3) How do mentors/mentees/leaders rate the promise of the intervention?
- 4) Is the mentoring/coaching model adopted with fidelity?
- 5) Does the intervention support job satisfaction (a mediator of retention)?

FEASIBILITY

- 1) Is the intervention feasible in relation to workload?
- 2) Can the elements of each intervention be accessed by participants in an equitable way?
- 3) Does it fit school systems and priorities?
- 4) What are the affordances and barriers of the intervention?

READINESS FOR TRIAL

- 1) Does the logic model adequately describe causal mechanisms?
- 2) Is it cost effective?
- 3) What are the barriers to taking the pilot to scale?
- 4) Are there any delivery risks?

Methods

Recruitment

Both Ambition Institute and the Chartered College of Teaching have invited expression of interest through existing contacts/members and through various media channels. From schools expressing an interest they have selected a broadly representative sample of schools across England in terms of the number of pupils, Ofsted rating, percentage of Free School Meals and a mixture of urban and rural schools. This includes alternative provision settings and special schools, but otherwise excludes non-state schools. However, schools will not be recruited from the regions in the north west and north east of England in which the Early Career Framework is being rolled out during the 2019-20 academic year.

Within the schools selected, the pilots will then proceed with as many of the mentors and NQTs as possible. The exception is those ECTs training through the Teach First PGDE programme, as this is a two-year programme which already includes support during the year in which teachers are newly qualified.

With these eligibility criteria, we anticipate recruitment number to be:

Ambition Institute Model A: 10 primary and 10 secondary schools (possibly including alternative provision/special schools)

<u>Ambition Institute Model B</u>: 10 primary and 10 secondary schools (possibly including alternative provision/special schools) + an additional 10 schools belonging to a single Multi-Academy Trust.

<u>Chartered College of Teaching</u>: 30-40 primary and secondary schools, including at least 10 teachers making up a phase-specific group at Key stage 1 and 10 teachers to make up an English subject specific group at secondary.

In order to better understand the impact of the pilots upon mentoring and ECTs, we will also deploy a control group survey to better understand 'normal practice' around processes of supporting ECTS. Recruitment will be through direct approach to a purposeful sample of schools having comparable characteristics to those within the pilots. This will be done by grouping schools across the three pilot programmes according to their size (number of pupils), Ofsted rating, free school meals and whether they are in an urban or rural location. From the national list of schools we will then select and approach schools such that we have comparable groups across these characteristics. We will then also open the survey out through social media to increase participation further (whilst keeping the purposefully sampled data set intact). We therefore anticipate:

Control group: Representatives of 70+ schools which reflect the makeup of the intervention schools.

Data collection

Overall Approach

During such a short pilot, it is necessary to focus upon indicators of change which relate to the research questions and which can be meaningfully assessed over the year. The below methodology aims to provide evidence of promise, feasibility and readiness for trial after a single term of the pilots, with a deeper understanding of these dimensions at the end of the year. We will deploy tools and measures which allow comparison across the three pilot models, whilst ensuring that the unique elements of each route are rigorously evaluated. The overall approach includes:

Method	Detail	Sample	Timing	
Online surveys	Include survey items common across pilots models and items specific to each model.	All mentors, mentees and a senior leader from each school.	Pre-training, November and May.	
In-depth case study visits	Interrogation of materials, interviews and observation of coaching and mentoring sessions.	21 schools (see discussion below).	Visits in November and May.	

Triangulation of evidence from mentee, mentor and senior leaders is key to ensuring a reliable picture of impact both across and within each pilot model. Our analysis of the surveys, interviews and observations would allow interrogation of how far these parties in each school corroborate promise, feasibility and readiness for trial. Furthermore, this will allow us to elucidate any differential effects at the level of mentee, mentor and school leaders both within and across the pilots.

Indicators

Following two set-up meetings and an Intervention Delivery and Evaluation Analysis (IDEA) Workshop with each developer, as well as interrogation of relevant literature, we have determined a set of indicators of promise, feasibility and scalability that can be used to answer the proposed research questions (see Table below).

Dimension	Re	search Questions	Indicators	Methods
Promise	1)	How does the pilot influence ECT efficacy?	ECT efficacy: self + mentor ratings	Survey pre-Nov-May (vs control)
	2)	How does the pilot influence mentor efficacy/quality?	Mentor efficacy Mentor self-efficacy in relation to ECF Mentor-mentee relationship.	Survey Nov-May (vs control)
	3)	How do mentors/mentees/leaders rate the promise of the pilot?	Rating of promise	Survey Nov-May Case studies: interview
	me me	Is the mentoring/coaching model adopted with fidelity?	Uptake of mentor/coaching model	Survey Nov-May (vs control) Case Studies: interview & observation
	5)	Does the pilot support job satisfaction (a mediator of retention)?	Job satisfaction / intention to stay	Survey Nov-May (vs control)
Feasibility	1)	In the intervention feasible in relation to workload?	Perceived cost- benefit	Survey Nov-May Control survey to assess 'normal practice'
	each interve accessed by in an equitab 3) Does it fit so and priorities	Can the elements of each intervention be accessed by participants in an equitable way?	Engagement with intervention	Engagement data overall (anonymous). Case studies: engagement data of individuals/schools;
		Does it fit school systems and priorities?		interviews. Review of materials, sessions and support.
	4)	What are the affordances and barriers of the pilot?		
Scalability / Readiness for Trial	1)	Does the logic model adequately describe causal mechanisms?	Perceived importance of programme elements	Survey Nov-May Case studies: interview
	2)	Is it cost effective?	Cost-evaluation (per mentee / mentor)	Collected from developers. Survey May
	3)	What are the barriers at taking the pilot to scale?	Scalability of programme elements System capacity	Survey Nov-May (vs control) Case studies: interview, review of materials, sessions and support. Contextual data about workforce etc.
	4)	Are there any delivery risks?	Identified risks	Standing item in developer-evaluator meetings

The following provides details around the type of data that will be collected and how this will be carried out:

Surveys

Surveys will be administered online. The first data collection point will be prior to the start of the pilot programmes. Both Ambition Institute and the Chartered College of Teaching will require completion of the surveys prior to beginning the delivery of the first materials. The second data point in November and the final survey point in May will also be managed through the link to surveys being embedded within tasks as part of the interventions. Direct contact with participants will also be deployed (for example in contacting school leaders who are not directly engaging with programme materials). The survey will be administered by the evaluators, with the developers following up to ensure return rates (Data Sharing Agreements are in place to ensure compliance with data protection legislation).

We anticipate the control group survey to be administered at approximately the same time as the final survey in May, in order to provide comparisons of salient indicators at that point.

Surveys will be designed to be adaptive such that common questions are asked relating to some indicators across roles (mentors, mentees, school leaders) and across the three pilot programmes. We recognise however that some respondents will have multiple roles concurrently, and they will be asked questions pertaining to each of their roles in this case. In addition we anticipate that there will be survey items which are specific to each of the pilot programmes. We will utilise the case studies and early survey to devise items for the later surveys, as well as discussion with the developers and interrogation of materials as they are produced and delivered.

Due to the timescales of delivery it is not possible to validate surveys statistically. As such, we will pilot surveys to check if the wording and length are appropriate, and use previously validated survey items where possible. Surveys will be used to assess the proposed indicators as indicated below:

	Pre-s	Pre-survey November Survey			May Surve	ay)				
	Mentee	Mentor	Senior Leader	Mentee	Mentor	Senior Leader	Mentee	Mentor	Senior Leader	Control Survey (May)
ECT efficacy	✓			✓	✓	✓	✓	✓	✓	✓
Mentor efficacy		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mentor self-efficacy in relation to the ECF		✓			✓			✓		✓
Mentor-mentee relationship				✓	✓	✓	✓	✓	✓	✓
Job satisfaction / intention to stay				✓	✓		✓	✓		✓
Rating of promise of the pilot				✓	✓	✓	✓	✓	✓	
Uptake of mentor/coaching model				✓	✓	✓	✓	✓	✓	
Perceived cost-benefit of pilot approach				✓	✓	✓	✓	✓	✓	
Perceived importance of elements for each pilot				✓	✓		✓	✓		
Participant views of scalability				✓	✓	✓	✓	✓	✓	

Engagement data

Both Ambition Institute and the Chartered College of Teaching will be collecting data around participation in elements of the pilot programmes, as well as data around online engagement. This will include 'attendance' at online seminars, the completion of tasks, setting and reviewing targets / action steps, data about login time, duration and frequency. Analysis of these data will allow consideration of whether the course elements are accessible to all participants equally, for example whether sessions within the school day or during twilight are difficult for some teacher to engage with.

These data will be shared (anonymously) by the developers, and the evaluators will interrogate them statistically in order to ascertain trends and variance in engagement, both within and across the pilot programmes. We will also utilise the engagement data of individuals to guide interviews within case studies (subject to their consent), as detailed below.

Case studies

Case studies will allow a greater depth of insight into the impact of the pilot programmes than can be gained through survey alone, although they will both inform and be informed by the surveys.

We will select the case studies to, as far possible, include a spread of school characteristics (number of pupils, Ofsted rating, percentage of Free School Meals and urban versus rural schools). We will do this across the different pilot programmes and routes. Whilst being responsive to particular cases of interest, we anticipate the following case studies:

<u>Ambition Institute model A</u>: two of the ten primary schools; two of the ten secondary schools; one alternative provision setting (if recruited).

<u>Ambition Institute model B</u>: two of the ten primary schools; two of the ten secondary schools; one alternative provision setting (if recruited); two of the schools within the Multi-Academy Trust recruited.

<u>Chartered College of Teaching</u>: two primary schools; two secondary schools; one alternative provision setting (if recruited); two of the ten schools using in subject-specific materials; two of the ten schools using phase specific-materials.

We therefore anticipate around 21 case study schools. Where possible, we will visit each of these schools in both November and in May, but will account for any withdrawal with additional visits, and may take up case study visits to other settings of interest.

During the case studies we will deploy interviews and observations:

<u>Interviews</u>: Semi-structured interviews of mentees, mentors and school leaders will be semi-structured, and will follow a devised protocol around the evaluation research questions. Where possible they will draw on relevant engagement data. Interviews will be audio recorded and transcribed.

<u>Observations</u>: Observations of mentoring/coaching sessions will be undertaken, using a devised protocol. Furthermore, in assessing the quality of materials and sessions (see below) evaluators will, where possible, observe those deployed with or involving teachers from casestudy schools.

Review of Programme Elements

As well as survey items pertaining to perceived quality of resources and sessions within each pilot programme, the evaluation team will observe live and/or review recordings of online sessions, asynchronous online discussions, attend one of the regional launch conferences (Ambition Institute models only), review materials and engage with other programme elements in order to both understand the processes of support and to evaluate quality. If necessary, the evaluators will further consult with phase and subject experts to inform this evaluation.

Cost evaluation

We will follow the June 2016 EEF Guidance on Cost Evaluation in estimating the costs of the delivery of the intervention. We will collect cost data from the developer via a short interview and a pro-forma. We will collect data on costs incurred by schools. In addition to staff time to engage with elements of each pilot programme, we will estimate the staff time required to plan, implement and support changes in mentoring processes, using both survey data and data from the case studies. As per the EEF guidance, we will report 'staff time' required separately to other costs.

- Provide details of the methods and tools that will be used to answer the research questions and a brief description of why these methods are appropriate for collecting the evidence. A table should be included that shows what data will be used to answer the questions under each of the three success criteria.
- Provide a brief description of how the logic model will be created, when it will be created, and who will have input into the model (this could be discussed in an Intervention Delivery and Evaluation Analysis (IDEA) workshop¹.
- Provide details of who will collect the data. If the project delivery team will be involved, outline any provision to prevent bias (e.g., telling the participants that survey data will be anonymous and analysed by the evaluators, shadowing a sample of interviews).

Data analysis

Quantitative data will be obtained through the surveys, which will be analysed descriptively, with inferential statistics used where possible. However, any statistical tests will have low power due to the small sample size. As such, non-significant changes in the responses to quantitative scales deployed within the surveys will be reported but related to trends and noting the sample size limitations around significance.

Surveys will contain validated scales pertaining to the indicators described above. Raw numerical scores from these scales will be used to detect significant differences over the pilot year through comparisons of survey data prior to the pilot, in November and in May. The selection of statistical tests (e.g. t-tests) will be made according to the nature of the validated instruments and data conditions (e.g. assumptions of normality).

Comparisons will be made between the indicators from the small additional group of participants receiving phase specific and subject specific resources within the Chartered College of Teaching pilot, and those within the broader pilot. Similar comparisons will also be made between the schools within the Ambition Institute model B programme who belong to a single Multi-Academy Trust, and those across the broader pilot.

The control survey will be analysed descriptively and will additionally provide comparison between the end of year (May) survey from participants on each of the three pilot programmes and 'business as usual' mentoring practices. It should be noted that control schools will not have introduced the ECF into their mentoring processes yet, so only indicators pertaining to ECT and mentor efficacy, mentor-ECT relationship and job-satisfaction will be comparable. Such comparisons will be made using inferential statistics (likely t-tests). The control survey will however provide important data around existing mentoring practices in schools.

Qualitative data obtained from the case study interviews will be transcribed, coded and analysed thematically (e.g. Braun & Clarke, 2006). Observation data will be coded and analysed thematically also. Initial collection through protocols and therefore initial coding will follow the evaluation research questions. Form this further coding will be developed and emergent themes analysed. The themes emerging will also be informed by the survey results.

Quantitative engagement data from the developers will be used to assess feasibility of the various pilot elements. Relative lack of engagement will be taken as an indicator of a programme element being unfeasible and/or not valued by participants. Such lack of engagement will be defined through participation and task completion data which falls below the expected levels outlined within the

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¹ Please see the IPE guidance pages 10-11 here.

programme setup sessions. Examples include low participation rate in online webinars, or engagement with online materials for only a brief periods of time. However, such data will inform case study visits (see above) such that these indicators are investigated further.

Ethics and registration

The trial was approved by UCL IOE Research Ethics Committee: REC 1211, on 2nd April 2019.

Since this is a pilot evaluation, the study aims to describe the intervention and to explore the promise, feasibility and scalability of the intervention, the evaluation will not be registered as a trial.

We intend to process personal data for public interest purposes (See data protection below.) Nevertheless, we will provide an opportunity for participants to withdraw their data from any data processing as part of the research to ensure that they have no objection to their data being processed in this way. This will demonstrate that the processing does not impinge on anyone's rights and meet our responsibilities under the BERA Ethical Guidelines for Educational Research (particularly regarding informed consent, openness and disclosure).

Participants will be informed of the research through information sheets distributed before the first survey point, which is in turn prior to the start of the pilots. The information sheets and withdrawal forms for this purpose explain the pilot and the research being conducted in simple language, provide opportunities to ask additional questions, and provide clear steps to follow if they wish to be withdrawn from any data processing as part of the research. The sheet and form also make it clear that data can be withdrawn at this point or at any point during the research, in line with requirements to ensure participation is free from coercion.

Where the research involves more active participation of participants during the case studies, we collect unambiguous consent using further information sheets and consent forms.

Outcomes of the project will be publicly reported through an EEF evaluation report and subsequent academic publications. No outcomes will include reporting that could allow for the identification of particular schools or pupils that participated in the research. Evidence of promise will be reported as aggregated statistics while the reporting of case study data will ensure that any references to individual schools and teachers are anonymised or removed, where residual risk of identification remains.

Data protection

Data will be processed in line with data protection legislation (including the General Data Protection Regulation, GDPR), and in line with the interests of the participants. The project is registered with the UCL Data Protection Officer (registration number: Z6364106/2019/04/104 social research). UCL has carried out an assessment of their legal basis for processing data. Data will be processed by UCL on the basis of the public task purpose (as per condition 6(1)e of the GDPR), and by HTSA on the basis of the legitimate interest purpose (as per condition 6(1)f of the GDPR). UCL has reviewed current ICO guidance available here: https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/lawful-basis-for-processing/public-task/, and has determined that this research forms part of its performance of a task in the public interest, as one of its core purposes provided for in its Charter and Statutes.

The collection of ethnicity data is recognised as special category and is justified Article 9(2) of the GDPR. We are collecting this to allow research into whether there are differing perceptions of mentoring, or job satisfaction/intention to stay in the profession, amongst self-declaring BME teachers. This is a research interest of the evaluation team rather than a focus of this evaluation. Providing ethnicity information will be optional, and more broadly we will make clear that declining to provide data for evaluation does not limit participants receiving the pilot programme.

Participants will be informed of the proposed data processing and given an opportunity to object to this, and withdraw their data. The information which will be provided to participants explains in clear and plain non-technical language the purpose to which we will put the data, that they can object to this data and this will be respected, contact details of the organisation, and categories of data that we will be processing and that the data processing will be compliant with the GDPR and data protection legislation. Further details on the lawful basis for data processing are available on request.

The evaluation team at UCL have carried out a data protection impact assessment and will put in place a data management plan. As part of this data management plan, data will be checked and cleaned to ensure the GDPR principle (d) of accuracy is met.

Data security

All personal data collected or obtained as part of this project will be treated as "Highly Restricted" under UCL Data Protection classification guidance. The following data will be collected:

Personal Data

- i) Name;
- ii) Email address;
- iii) Age;
- iv) Employing school name and postcode;
- v) Associations with mentors and/or mentees in the same school;
- vi) Role in school;
- vii) Number of years in profession and in role;
- viii) Subject (degree) background;
- ix) Route through which they trained to be a teacher;
- x) Data around engagement with aspects of the course learning goals ('steps') and assessment against them, presence at online sessions, data about logins and downloads.

Sensitive Personal Data

i) Ethnicity.

All personal data will be stored, processed and analysed on the UCL Data Safe Haven (DSH), the technical infrastructure that UCL has built specifically to host sensitive research data.

Qualitative data will be pseudonymised. Once pseudonymised it will be stored in a secure folder on the UCL network within a project folder only accessible to project team members (using appropriate access control methods), and the pseudonymisation key stored on the DSH. Fieldnotes and audio recordings will be stored in a locked filing cabinet within a locked office at UCL to which only the evaluation team will have access.

Some data transfer will be required between collaborators on this project at UCL, Ambition Institute and the Chartered College of Teaching. This will be conducted by making a secure remote connection (e.g. VPN) to the university network and transferring data across this. In addition, the data will be encrypted before sharing using a password shared between research team members by separate communication.

Online surveys for teachers will be administered through UCL's REDCap survey system whereby data is uploaded directly to the DSH in an encrypted form.

A risk assessment has been conducted for the storage, processing and transfer of all personal data for this evaluation. Team members undertake regular annual data security training.

The DSH environment is certified to ISO27001:2013 with BSI – certificate number: IS 612909. The most recent external audit was in May 2017. The hosting is on a thin client system (DSH) with dual factor authentication. This is a multi-user system with permission-based access control. The DSH is subject to penetration testing on an on-going basis. The DSH has its own firewall separating it from the UCL corporate network and the UCL network has a corporate firewall with a default deny policy for inbound connections. The DSH remote access mechanism is protected by a SSL certificate issued by Terena as well as DualShield dual factor authentication, which couples an Active Directory password with token-based authentication. Connections are AES256 encrypted. Data is transferred into the DSH system via a secure gateway technology which uses SSL/TLS with data retained via policy and systems that prevent data leakage.

Data will be kept for at least the duration of the project, until successful submission of the data to the EEF's data archive has been agreed by the funder. We may keep anonymised data beyond this period for the purpose of supporting submissions and revisions to submissions to academic journals. They will be kept for no longer than 10 years in line with UCL's guidance on retention of records for research.

UCL will sign a data sharing agreement with Ambition Institute, and one with the Chartered College of Teaching, outlining data security and protection issues.

Personnel

Ambition Institute Development and Delivery Team:

Genevieve Field: Dean of Teaching Programmes

Kyle Bailey: Fellow

Chartered College of Teaching Development and Delivery Team:

Hannah Tyreman, Head of Online Learning and Community: Curriculum design, writing and programme facilitation

Cat Scutt, Director of Education and Research: Curriculum design, writing and programme facilitation

Nick Gray, Curriculum and Assessment Design Manager: Curriculum design and early career teacher specialism

Kieran Briggs, Learning Platforms Manager: Online learning platform management and development

Alyssia Frankland, Digital Learning Content Officer: Digital learning content creation and administration

Jane Anderson, Project Manager

Salma Islam, Administrator

UCL Institute of Education Evaluation Team:

Dr Mark Hardman: Principle Investigator, overall direction and lead on qualitative methods.

Dr Becky Taylor: surveys and quantitative methods.

Dr Caroline Daly: support survey and case study/interview design and qualitative analysis.

Polly Glegg: case studies and qualitative analysis.

Beth Stiasny: case studies and qualitative analysis.

Haira Gandolfi and Claire Pillinger (research assistants): case studies, quantitative and qualitative analysis, administration.

Prof Jeremy Hodgen: advising the team on research design and analysis.

Prof Martin Mills, Head of Centre for Teachers and Teaching Research: deploying staff and advising the team on research design and analysis.

Risks

Risk	Likelihood	Impact	Action
Failure to recruit	Low / Moderate	Moderate	 Establish timeline for recruitment involving a variety of methods Regular developer and evaluator team contact
Failure to gain data from schools	n Moderate	Moderate	 Ensure submission processes and timeline well understood by schools Clarity of requirements in MOUs Oversampling - all mentees, mentors and senior leader from each school Dedicated chasing time
Attrition of pilot schools or teachers	Moderate	Low	 One term, then one-year collection points Regular contact with pilot schools Allocate staff time to school liaison at key data collection points (September, December and June) Regular developer and evaluator team contact around any lack of engagement
Attrition of case study schools	Moderate	Moderate	 Relatively easy to select other schools December and June case studies could differ if attrition Case study expectations clear in MOUs and initial contact/materials
Failure to gain data from control survey	Moderate	Moderate	 Oversampling for direct approach to schools. Staff time allocated to chasing and to prompting return. Incentivisation (prize draw).
Loss of evaluation staff	Low	Low	UCL IOE has a large staff team and would reallocate staff

Timeline

Dates	Activity	Staff responsible/ leading
Mar 2019 - May 2019	School Recruitment & data collection	Ambition Institute & Chartered College of Teaching
Mar 2019 - onwards	Resource preparation	Ambition Institute & Chartered College of Teaching
June 2019 – Sept 2019	Pre-survey	UCL Institute of Education
June 2019 – Aug 2019	Training of faculty / staff	Ambition Institute & Chartered College of Teaching
June 2019 – July 2020	Intervention delivery	Ambition Institute & Chartered College of Teaching
July 2019	Launch conferences	Ambition Institute
Sept 2019	Training of schools based facilitators	Ambition Institute
Sept 2019 – Nov 2020	Observation of delivery components (Term 1)	UCL Institute of Education
Sept 2019	Case study selection	UCL Institute of Education
Nov 2019	Case study visits	UCL Institute of Education
Nov 2019	Surveys	UCL Institute of Education
Dec 2019 – Jan 2020	Initial analysis and Reporting (on Term 1)	UCL Institute of Education
Jan 2020 – May 2020	Observation of delivery components (on Term 2)	UCL Institute of Education
May 2020	Case study visits	UCL Institute of Education
May 2020	Surveys	UCL Institute of Education
June 2020	Analysis and Reporting	UCL Institute of Education

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