'Motivating teachers with incentivised pay and coaching' randomised control trial (ICR trial)

Closure report: Understanding factors influencing participant recruitment failure

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Table of Contents

Ta	ble of Contents	i
Fig	gures	ii
Ta	bles	iii
Ex	ecutive Summary	iv
Re	ecommendations	vi
1.	Introduction	1
	1.1. Background and research on pay incentives in the United States and the UK	2
	1.2. Summary of the planned trial	3
2.	Methodological approach	7
	2.1. Survey	7
	2.2. Documentary review	8
	2.3. Interviews	8
3.	Findings from survey, document review and interviews	10
	3.1. Principled objectors: the problems with incentives	10
	3.1. Principled objectors: the problems with incentives	
		11
	3.2. Design concerns: divisiveness and attribution	11 12
	3.2. Design concerns: divisiveness and attribution	11 12
	3.2. Design concerns: divisiveness and attribution	11 12 13
4.	3.2. Design concerns: divisiveness and attribution	11121314
4.	3.2. Design concerns: divisiveness and attribution	11131414
4.	3.2. Design concerns: divisiveness and attribution	1113141417

Figures

Figure 1. l	Planned randomisation design tree	. 4
Figure 2.	Trial recruitment and communications timeline	13

Tables

Table 1. Question items included in online survey	8
Table 2. Teacher interviewees	9

Executive Summary

This report explores the factors that influenced the low recruitment of teachers to take part in a randomised control trial of incentive payments, and in particular, why the recruitment process was ultimately unsuccessful. The trial sought to assess whether pupil attainment in maths could be improved by motivating primary-school and secondary-school maths teachers through incentivised pay and coaching. Incentive payments would have been in addition to normal teacher pay and paid up-front, with retention of the incentive payment contingent on the performance of pupils in end-of-year tests. Due to an insufficient number of teachers signing up, this study was cancelled. As interest in teacher incentives or pay for performance is likely to continue, it is important to learn as much as possible from this work for future projects.

This report examines aspects of the intervention, design of the trial and communication strategies that may explain the shortfall in recruitment. We gathered evidence for this report by: reviewing the recruitment approach and materials; analysing the results of an online survey completed by 83 teachers who opted out of the trial; and by conducting semi-structured telephone interviews with 13 teachers (six who had opted out of the trial, five who had opted in and two headteachers).

In summary, we found that:

- I. Teachers who opted out tended to be resistant to the principle of a financial incentive, but these views were not universally held. Sixty-four per cent of survey respondents agreed with the statement that 'Awarding a bonus is not an appropriate way to incentivise teachers to make extra effort', while 36 per cent disagreed.
- II. Some of the teachers and both headteachers we interviewed **expressed serious concerns about the perceived unfairness and impact of a financial incentive that, as a consequence of the research design, would have been available to some teachers but not others.** Five of the interviewees described such an incentive as 'divisive', and four were concerned it would undermine collaboration between maths teachers within the same department. Both the headteachers and two other interviewees said that the mechanism for assessing individual teachers' performance did not reflect real life within their schools, in which pupils moved between sets and could be taught by multiple maths teachers in the course of any one academic year. Some teachers were also opposed to the principle of using student test scores to judge the performance of teachers.
- III. **Respondents expressed concern about teachers in receipt of the incentive payment 'gaming the system'** by focusing more attention on those children on whose test performance the retention of the incentive would be decided, and less attention on children in other classes (two interviewees and seven survey respondents).
- IV. In terms of factors motivating teachers' participation in the trial, teachers reported interest in coaching, the attraction of receiving additional pay, and the contribution the trial would make to education research.

- V. A number of teachers reported interest in additional coaching and mentoring, but some were concerned that the trial would disrupt existing coaching programmes or place added pressure on their time. One headteacher had decided against the school entering the trial because coaching was already an intrinsic part of the development of every teacher in the school, and it was believed the trial design would imply that some teachers would have to forego coaching for its duration. Three of the teachers we interviewed were concerned about the additional demand that coaching would place on their time.
- VI. The communications strategy could have been refined, but this was not the primary reason for under-recruitment. The CEO of the academy trust communicated the vision for the trial with clarity and passion at a launch meeting for all headteachers, expressing enthusiasm for the trust's involvement in cutting-edge educational research. The response of the headteachers was mixed, however some dismissed the idea of participating in the trial in the course of informal conversations at the launch meeting. One headteacher suggested that further consultation and testing of the trial design with headteachers might have helped to achieve schools' buy-in. While the academy trust involved in the project had input into decisions about its design from the outset, this did not guarantee that headteachers or other teaching staff within the trust's chain of schools were consulted before decisions were taken, and later evidence suggests that such consultation was rare.
- VII. Among those who made an active decision to participate or not, there was a good understanding of the trial; the teachers believed they had enough information to make an informed decision. In the survey of teachers who opted out of the trial, more than half said they understood the project well, and almost all interviewees said they understood the project and that the communication was clear. On the basis of our interviews and review of the recruitment materials, the academy trust's head office was effective in communicating information about the trial with clarity, enthusiasm and persistence.
- VIII. However, not all teachers were aware that they had the opportunity to participate and not all teachers had read the emails intended for them. This may have been because a proportion of schools' leadership teams chose not to communicate the trial further, having decided against participation at the school level.
- IX. The assumptions made at the outset about the number of schools and teachers that could be expected to sign up for the trial were not realistic. Teachers from fewer than half the schools in the academy trust agreed to participate. The protocol recognised 'there is a chance that not all schools will participate' but did not identify the risk that fewer than half might do so. Given previous successes with recruitment on other projects, contributors to the project, including the academy trust, had an expectation that uptake would be higher than it was. Furthermore, a third of the people who responded to the opt-out survey at the final stage of recruitment considered themselves not eligible to take part in the trial. Some were not maths teachers, some knew they would be moving year groups and others taught Year 1 classes that would not be part of the trial.

Recommendations

Recruitment strategies in schools should consider carefully how to secure senior staff buy-in

Our findings reveal that securing headteacher or senior buy-in is crucial to set the general mood for acceptability among teachers in a school. It would therefore be beneficial for the leadership of the academy trust(s) involved to consult more closely with their headteachers to secure buy-in before important design decisions are taken.

Developers and evaluators should consider placing greater emphasis on the involvement of school practitioners in designing trials and the way they are communicated

Certain aspects of the trial design were deemed unfeasible by teachers, with a particular concern about the unfairness of the reward mechanism given that pupils commonly move between sets and thus may be taught by several maths teachers within the school year. Though the mechanism for awarding the incentive was adjusted to reflect this risk, either not all teachers knew this, or some believed the adjustment would not provide an adequate solution. As well as adversely affecting recruitment, this problem could have ruled out a meaningful evaluation of the motivational impact of the financial incentive. It may be that clearer communication with school practitioners could have helped with this issue.

The widening of participation in trials, where possible to include more than one region or academy trust, should be considered

There were valid reasons behind the decision to implement this trial in schools within a single academy trust: for example, it would be simpler to apply the payment mechanism through a single HR department, and the chosen academy trust demonstrated a high level of commitment to the trial's success. However, the number of schools within the trust dictated that randomisation would have to take place at teacher, rather than whole-school level. Randomisation at the school level would have been preferred by all parties, but it was discounted because there were too few schools within the trust to provide sufficient statistical power based on Education Endowment Foundation (EEF) guidelines. This problem increased the complexity of randomisation and may also have made the trial design unacceptable to the majority of teachers. Had the trial been larger, allowing randomisation across many schools, for example, several of the most significant risks which crystallised would have been diminished. Furthermore, serious concerns were voiced by headteachers and teachers about the potentially divisive nature of a financial incentive that would be available to some teachers in a school but not others. These concerns would have been diminished had a financial incentive been available to the whole school or maths department. Some of those opting out said they would have been attracted by a financial reward that encouraged collaboration among teachers rather than jeopardised it. Whole-school or

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departmental-level randomisation would also have removed the problem of pupils being taught by more than one teacher within the same year. Research that has been published in the United States also suggests that, in the few successful trials of the effect of performance-related pay in schools, randomisation has taken place at the whole-school or departmental level.

Particularly for projects as complicated as this, the importance of funders, developers and evaluators meeting iteratively to discuss and resolve questions is critical

In this trial, the intervention had been originally developed in the United States. While it had then undergone refinement with input from a UK-based academy trust, there may still have been cultural and practical differences between the US and UK education systems that were not properly understood or addressed. The different locations and time zones also made collaboration more challenging. As a result, issues that ultimately threatened the feasibility of the trial may not have been understood or tested sufficiently between the key players.

1. Introduction

This report explores the factors that influenced the low recruitment of teachers to take part in a randomised control trial of incentive payments funded by the Education Endowment Foundation (EEF), and in particular, why the recruitment process was ultimately unsuccessful. The trial was designed as a randomised control trial with the title 'Motivating teachers with incentivised pay and coaching', and was commonly referred to as the 'Incentives and Coaching Randomised Controlled Trial' (ICR). The trial's main purpose was to test whether a financial incentive for teachers would improve their pupils' attainment. A secondary objective was to test the impact of coaching. Due to an insufficient number of teachers signing up to participate, the trial was cancelled in April 2017, after various recruitment activities had been undertaken over nearly 12 months.

The trial was to be implemented in an academy trust with fewer than 50 member schools and about 400 teachers who were potentially eligible. Only 46 teachers had signed up to participate in the study when the decision was taken to terminate the trial. Based on the power calculations in the study protocol, at least 241 teachers were needed for the study to be viable.¹

The EEF commissioned RAND Europe to be independent evaluators for this trial to explore the reasons why teachers declined to participate. This report sheds light on the factors that influenced teachers' choices to enter or not to enter the trial. The lessons learned from this cancelled trial will inform future efforts to engage teachers in research in similar contexts.

There are four research questions this report seeks to answer:

- 1. What aspects of the intervention influenced teachers' decision to participate or not in the trial?
- 2. What aspects of the trial design influenced teachers' decision to participate or not in the trial?
- 3. What aspects of the recruitment process influenced teachers' decision to participate or not in the trial?
- 4. What other reasons influenced teachers' decision to participate or not in the trial?

We addressed these questions by performing three tasks. Firstly, we collected and analysed responses to a brief survey on reasons for not participating in the trial from 83 people who had actively opted out. Secondly, we reviewed how the academy trust had communicated information about the trial and the materials it shared with the school staff. Finally, we undertook and analysed 13 semi-structured interviews with teachers and headteachers to explore their perceptions of the trial and the reasons for their decision to opt in or opt out.

We first briefly summarise past evidence on performance-related pay incentives in teaching and then provide an overview of the trial design and how it was to be implemented. In the second section we

¹ As this report will discuss, the number of eligible teachers was overestimated during the planning of the study.

describe the methods we used to explore the research questions. In the third section we present our findings and identify themes which recurred in the survey, documentary review and interview analyses. Finally, we summarise our conclusions and make recommendations with the aim of informing the design and roll-out of future research projects in schools. In particular, we explore what could be done differently to improve the recruitment of teachers in future trials, particularly those which involve potentially controversial features, such as performance-related pay, and ask what could be changed in the way research projects are presented and communicated to teachers.

Background and research on pay incentives in the United States and the UK

While performance-based compensation systems in primary and secondary education are no longer a novelty in the United States, they are not yet common in the UK. This project comes at a time when the government has relatively recently (2014) introduced performance-related pay, where a teacher's pay progression is dependent upon his or her success in the classroom (Department for Education 2016). How success is defined depends on a school's or authority's specific appraisal arrangements.

Research from the United States finds mixed results regarding the effects of performance-related pay on pupil achievement while there is not much evidence from the UK in this area. For example, Atkinson et al. (2009) argue that performance-related pay can have a positive impact on how well the pupils do. Podgursky and Springer (2007) reviewed a number of US performance-based schemes, and found that linking teachers' incomes to pupil achievement can lead to an improvement in pupil achievement. In contrast, RAND researchers have found only small, statistically non-significant impacts on pupil achievement scores in three randomised evaluations of incentive pay interventions in schools in the United States (Marsh et al. 2011; Springer et al. 2011; Springer et al. 2012). Similar impacts were observed in Goodman and Turner's (2013) research on New York schools, and the authors highlight the importance of the design of teacher incentive pay programmes in ensuring that such incentives work. It should however be noted that the ICR trial had more in common with the incentive structure tested in the Fryer et al. (2012) research project, which did find positive results. This research is described in more detail later on.

The concept of performance-related pay in general has received a mixed response among UK teachers. The Teacher Omnibus Survey of 2014 asked 1,524 practising teachers from 1,164 primary and secondary schools in England whether they agreed that pay should be determined on the basis of performance (O'Beirne & Pyle 2014). Forty-three per cent of respondents agreed with the statement versus 38 per cent who disagreed, while 18 per cent neither agreed nor disagreed (O'Beirne & Pyle 2014, 24). The National Union of Teachers (NUT) opposes performance-based compensation systems in schools as it believes these systems to be 'unfair and unworkable' (NUT 2017). In addition, the union cites the mixed evidence on performance pay and argues in favour of other models that it believes to be more effective and sustainable. It is important to recognise that the trial in question offered a performance-based incentive payment on top of a standard salary, which is structurally different from a pay system in which all progression is based on performance. Nevertheless, some of the reservations voiced by the teachers about performance-related pay in general might have influenced their response to the trial.

This aim of the ICR trial was to contribute to the literature in two significant ways. Firstly, no randomised evaluation of incentive pay interventions had been conducted in the UK context. Given the evidence thus far, rigorous research is needed to inform the policy debate in the UK. Secondly, unlike earlier randomised trials, this intervention proposed using a pure loss aversion² model where teachers received the performance bonus upfront and would need to return the bonus, or a proportion of it, if their students were not successful. The reason for having a loss aversion incentive model is that incentives framed as a potential loss are believed to be more effective because of a general aversion to loss (Camerer 2005; Neal 2011). Fryer et al. (2012) used a similar loss aversion design in a randomised controlled trial with 150 teachers in Chicago Heights in the United States, and found this intervention to be effective in improving pupil achievement.

In addition, coaching was also included as part of the intervention, on the basis that some teachers may be motivated by pay incentives but not know what to do to improve their performance. The coaching component could potentially increase teacher performance compared to the use of incentive pay alone. There is evidence that coaching can improve both teacher performance (e.g. skills and teaching practices) and pupil outcomes (Cornett & Knight 2008; Speck & Knipe 2001). However, the evidence relates to a diverse range of coaching interventions. Cornett and Knight (2008) distinguish between four types of coaching: (i) peer coaching; (ii) cognitive coaching; (iii) literacy coaching; and (iv) instructional coaching. The coaching intervention that was to be implemented as part of this trial was most similar to peer coaching, since current and former teachers were to take up the role of coach. Past evidence on peer coaching has shown that it can substantially support the take-up of new teaching skills and practices (Batesky 1991; Showers 1985). Coaching studies, as in the case of research on incentives, have primarily taken place in the United States. To our knowledge, there had been no previous study combining both loss aversion and coaching.

1.2. Summary of the planned trial

This intervention was funded by the EEF, and developed by researchers in the United States in consultation with the EEF and a UK-based academy trust. It was to be implemented by the academy trust, exclusively within schools that were part of its franchise. RAND Europe was appointed to conduct an independent evaluation of the intervention.

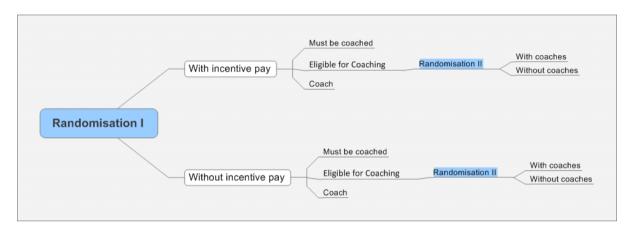
Within these overall responsibilities, the EEF was responsible for facilitating the set-up phase, reviewing reports and signing off the evaluation. The developers were responsible for administering the incentive payments to teachers and calculating the reward at the end of the school year. The multi-academy trust had responsibility for recruiting schools and teachers within the constraints placed on the trial, and all aspects of communication with the schools, including providing background information and distributing links to online surveys with teachers and headteachers, as well as the implementation of the coaching aspect of the intervention. RAND Europe had responsibility for the randomisation, outcome and process evaluations; trial design, analysis, reporting and quality assurance; and oversight of the third-party assessor to be appointed to administer blind testing for pupils in the treatment and control schools. However, all parties were consulted on the different parts of the project and collaborated on their final design.

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² Tversky and Kahneman (1992) define 'loss aversion' as the tendency of individuals to strongly prefer avoiding losses to acquiring gains.

The intervention intended to use monetary incentives and coaching for teachers to motivate them to improve their pupils' attainment. A two-stage randomisation was planned to allow RAND Europe to combine these two interventions. The first stage would be allocation to incentive condition or not, and the second stage allocation to the coaching condition or not, resulting in four groups. As shown in Figure 1, to determine the coaching condition, teachers in each school were to be classified by headteachers into one of three categories: 1. 'Must be coached' were teachers who needed the additional support and thus could not be denied coaching; 2. 'Eligible for coaching' were teachers identified as eligible for the coaching randomisation; and 3. 'Coach' were teachers who were either coaches already or were considered by the headteacher to be especially effective and experienced and therefore potentially able to act as a coach to other teachers.

Figure 1. Planned randomisation design tree



Teachers in the incentive group would receive a 'loss-framed' financial incentive of £4,000 at the beginning of the school year.³ 'Loss-framed' means all or a percentage of this amount may be recouped at the end of the year depending on the progress of the pupils taught by incentivised teachers relative to control pupils. Teachers who were randomised into the coaching groups would receive personalised coaching throughout the year, during which lessons would be observed weekly with changes recommended by coaches during 30-minute sessions each week. Box 1 at the end of this section presents in detail the plan for calculating the incentives, based on the study protocol (unpublished).

Coaching would be provided weekly to the teachers randomised to receive coaching. The coaching programme, developed by the academy trust, provides training to coaches along with general guidelines. Each school would implement the coaching either in accordance with the trust's central guidelines or through an existing approach developed independently by the school. This intervention was targeted at primary- and secondary-school teachers. Teachers who were eligible to participate in this trial were primary teachers of Years 2–6 and secondary mathematics teachers of Years 7–8 at one of the academy trust schools.

For the trial to reach any meaningful conclusions, a sufficient number of teachers had to sign up. Based on the information provided to the evaluation team, the schools in the academy trust contained more than 20,000 eligible pupils, and more than 300 teachers who would potentially be eligible to take part. A minimum of 241 teachers were needed in order to give the trial sufficient statistical power. At the time of the decision to terminate, only 46 teachers had agreed to participate.

³ Note that the main salary ranges for qualified teachers in England and Wales in 2016/17 (excluding London and fringes) are between £22,467 and £33,160 (Department for Education, 2016).

Box 1: Incentive payments

All participants in incentives conditions would receive the incentive bonus (£4,000) at the start of the year. At the end of the year, depending on pupil performance relative to similar pupils, teachers would either keep the full amount, or a percentage of the incentives bonus would be recouped through payroll in the following salary payment(s).

The amount of incentive retained would be determined by looking at the average percentile of growth for all pupils in a teacher's class, compared with pupils of similar prior attainment. Growth here means change in a standardised academy trust test or SATS score between the summer of 2016/2017 and the summer of 2017/2018. This comparison is possible because all pupils will have taken the same assessment at both time points. Otherwise, they are excluded from the calculation for fairness.

To allow for the movement of pupils between teachers within the same school year, the academy trust proposed to collect class lists on a termly basis. Pupils' test scores would then have been weighted according to the proportion of time spent with an individual teacher in that academic year.

If, on average, a teacher's pupils were in the 60th percentile or higher for growth, the teacher would retain the full incentive payment. Every percentile between the 60th and the 40th would equate to a £200 repayment. Anything below an average of the 40th percentile for an incentivised teacher's class would mean that the entire bonus would be recouped.

Pupils are only ever compared with pupils of similar or the same starting points in control teachers' classes or non-participating schools from the same academy trust. They are not compared with pupils in their own school or with pupils in any incentivised or coached teacher's class.

Example for an individual teacher: ten pupils all achieved a standardised score of 25 in their Year 3 assessment in 2016/2017. Their Year 4 standardised scores for 2017/2018, plus growth score, are ranked below:

Pupil ID	Pupil's 2017/2018 score	Growth score (2017/2018 minus 2016/2017 score of 25)	Percentile ranking*
1	30	+5	100
2	28	+3	90
3	26	+1	75
4	26	+1	75
5	24	-1	60
6	23	-2	50
7	20	-5	40
8	18	-7	30
9	16	-9	20
10	14	-11	10
Average	22.5	-2.5	55

*The average percentile ranking for all pupils in one teacher's class then gives the percentile ranking that determines the amount of incentive retained. So, for example, if a teacher's pupils achieved an average growth score which placed them in the 55th percentile, that teacher would have to pay back £1,000 of the £4,000 incentive (60–55=5, 5*200=1,000).

Source: Incentives and Coaching Research trial protocol (unpublished, 2). Incentive payment measures established by the developing team.

2. Methodological approach

Three tasks provided the core of our evidence for this report:

- 1. Conducting and analysing a brief survey of teachers on reasons for not participating in the trial.
- 2. Reviewing the academy trust's communication strategy regarding the study and the materials that were shared with the school staff.
- 3. Undertaking 13 semi-structured interviews with teachers and headteachers, to explore further their perceptions of the study and the reasons for their decision to opt in or opt out of the trial.

2.1. Survey

During the recruitment process, teachers who actively opted out of the trial were asked to complete a brief (anonymous) online survey about the reasons behind their decision not to participate. This survey was developed by RAND Europe in collaboration with the academy trust. The trust then sent the survey as a link in an email to all potentially eligible teachers who had not already communicated a decision to participate or not. Only those who actively opted out of the trial on receipt of the email were invited to complete the survey.

Table 1 lists the questions included in the survey and the number of valid responses obtained. The survey included seven statements about teachers' reasons for choosing not to participate in the trial. Teachers were asked to rate each of the seven potential reasons as 'Strongly disagree', 'Disagree', 'Agree' or 'Strongly agree'.⁴ In total, 83 individuals completed at least part of the survey.⁵ The majority were classroom teachers, although some respondents had other non-teaching roles in their schools.⁶ Furthermore, there were between 65 and 69 valid responses per multiple choice item⁷ and 38 open-ended responses listing other reasons or comments. For further details on the survey responses please refer to Appendix A.⁸

⁴ Unless otherwise stated, where we state the percentage of respondents who agreed or disagreed with these statements throughout this report, we have combined the 'Strongly agree/Agree' and the 'Strongly disagree/Disagree' categories.

⁵ Please note that the survey data extract contained 85 cases. However, two of these cases were responses to question 8 which the academy trust filled in after two individuals emailed them stating that they did not wish to participate in the trial but would be happy to be contacted to explain their reasons for not joining. Since these individuals did not complete the online survey themselves we do not count them in the total number of survey respondents.

⁶ We base this statement on findings from the survey's open-ended responses only. However, we do not know exactly how many of the participants completing the survey (83) did not have teaching roles, since there was no question asking what their roles were.

⁷ This represents a response rate of between 78 per cent and 83 per cent.

⁸ Note that actual responses are not reported to limit the chance of interviewees being identified.

Table 1. Question items included in online survey

	Name .	Proportion of responses by:				Number of	Item
	Items	Strongly disagree	Disagre e	Agree	Strongl y agree	valid responses	type
1	I do not have a clear understanding of how the trial will work	16%	48%	29%	7%	69	МС
2	Awarding a bonus is not an appropriate way to incentivise teachers to make extra effort	10%	26%	28%	36%	69	МС
3	The bonus was not large enough	31%	57%	7%	4%	67	MC
4	Receiving a bonus that might have to be paid back would have caused stress	6%	8%	45%	41%	66	MC
5	I don't think teachers' rewards should be based on their pupils' test scores	4%	15%	29%	52%	68	MC
6	I do not want to receive coaching	21%	61%	12%	6%	66	MC
7	I don't think it's fair to randomise teachers into groups which will be treated differently	12%	17%	49%	22%	65	МС
8	There was another reason why I did not want to take part (please specify)	N/A	N/A	N/A	N/A	38	OE

MC = Multiple choice

OE = Open-ended

2.2. Documentary review

All communication materials regarding the study used for recruiting teachers were reviewed by the team to assess the clarity, frequency and completeness of the information that was provided to teachers. The documentary review also served to define the used recruitment strategy and gauge whether the low participation rate could be the result of poor communication. The reviewed materials included email bulletins to school headteachers, study information uploaded on the academy trust online platform, presentations from webinars and in-person presentations, and physical and electronic letters to teachers. To clarify the communication process, the communication strategy was also discussed with the academy trust staff. Section 3.3 provides further details on the communication strategy that was used (e.g. the order in which materials were sent) and who received these materials.

2.3. Interviews

The survey and document review informed the final task: semi-structured interviews to delve deeper into the reasons behind the decisions either to participate or not to participate in the trial. The questions covered: (i) the communication that the respondents received about the study; (ii) their understanding of the trial; (iii) their reasons for and against participating; and (iv) their suggestions for designing similar research in the future. For these interviews, headteachers and teachers who opted into the trial were recruited through messages from the academy trust team, while teachers who opted out had previously registered their interest in being interviewed as part of the opt-out survey described above. The interviews were conducted by three RAND researchers who took detailed notes of the conversations and, where possible, took direct quotes from the participants. The evaluation team aimed to interview ten teachers who had agreed to take part in

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the trial, ten teachers who had opted out and up to six headteachers. The academy trust was able to nominate a total of 16 teachers and headteachers who gave their consent to be interviewed. Three of these potential interviewees did not ultimately make themselves available; therefore, a total of 13 interviews were conducted: six with teachers who opted out of the trial, five with teachers who opted in and two with headteachers. The interviews took approximately 20 minutes and followed the protocols included in Appendix B. Table 2 gives some information about the characteristics of the 11 teachers we interviewed.

Table 2. Teacher interviewees

Trial status	Primary or secondary school
Opt-out	All through
Opt-out	All through
Opt-out	Secondary
Opt-out	All through
Opt-out	Secondary
Opt-out	Primary
Opt-in	Primary
Opt-in	Primary
Opt-in	All through
Opt-in	Primary
Opt-in	Secondary

3. Findings from survey, document review and interviews

The survey, documentary review and interviews provided valuable insights into which aspects of the intervention and trial were seen as acceptable and/or appealing to teachers (and which were not), and what went well in the recruitment and communication about the intervention and trial and what could have been improved. We identified three recurring themes throughout the survey and interviews, namely: an aversion to the principle of performance-based pay; concerns regarding the design of the study; and issues with regard to the communication strategy used for the recruitment of this trial. In what follows, we provide an overview of these three themes. This section also reports teachers' suggestions for improving future research in this area.

3.1. Principled objectors: the problems with incentives

A recurrent theme was the principle of incentives in general and performance-related pay based on student test scores in particular. While the research project also included a coaching component, it was the incentive component that seems to have been the most important intervention factor in teachers' decisions not to participate. Teachers who opted in accepted, and sometimes even appreciated, the use of incentives. However, among the teachers who opted out, the majority of survey respondents, 44 out of 69, agreed that awarding a bonus was 'not an appropriate way' to incentivise teachers to make extra effort, while 25 out of 69 disagreed with this statement. Similarly, 55 out of 68 agreed that teachers' rewards should *not* be based on their pupils' test scores, versus only 13 out of 68 who disagreed with this statement. The interviews shed further light on how teachers may have felt about the incentives. According to one headteacher 'the concept of a financial incentive was divisive and insulting'. The issue may have been aggravated by the possibility of having to pay back the bonus: over four-fifths (57 out of 66) of opt-out survey respondents reported that having to pay back the incentive would have caused stress.

The interviews shed some light on why many teachers were reportedly against the use of incentives. Firstly, introducing an incentive was interpreted by some teachers as a signal they should work harder, a message which was not well received since it implies teachers are not already working hard enough. 'I am already working to my absolute very best; I can't work harder than I do', said one teacher, who disliked the insinuation that teachers would work harder when receiving an incentive. It is important to note here that no direction was given by the academy trust or the implementation team about what the incentives were intended for, so any assumptions about how to achieve a higher level of average pupil attainment came from the teachers themselves – this was intentionally a black-box⁹ study in that

⁹ The term 'black-box' refers to a system which can be viewed in terms of its inputs and outputs, without any knowledge about its internal workings.

respect. The planned process evaluation was focused on understanding what teachers actually did as a result of the intervention—it may have meant working differently rather than longer hours.

Furthermore, some teachers interpreted the monetary incentive as suggesting they were 'motivated by money'. However, as one teacher expressed in the open-ended response in the survey, teaching is 'a vocation, not a job'. Another teacher stated that 'any form of extrinsic reward' would be inappropriate. Indeed, one teacher described the incentive as 'insulting'. The monetary incentive was also seen as an inadequate solution, since it does not address the issue of a high workload. Some were concerned that the project would in fact increase the workload, as seen in some of the openended survey responses and one interview.

The views expressed towards the incentive scheme could perhaps be placed in context to be better understood. Many teachers reported stress and a high workload, and that the work they do is often undervalued (four survey responses and two interviewees). Most teachers work hard and long hours while receiving only a relatively modest salary (LKMco 2015). Furthermore, two interviewees said they felt society did not appreciate their work but made high demands, and one reported being suspicious of performance-based top-down initiatives. One interviewee even believed that the 'researchers already knew the answer they wanted to get', and another that the point of the project was 'to qualify the idea of performance-related pay in schools'. One teacher who was interviewed objected to any scheme that would pay some teachers extra while others in the profession were being made redundant due to school budget cuts. One headteacher expressed an additional concern that, whatever the trial's results, it would not be realistic or sustainable to implement incentive payments more widely in schools at a time of austerity, when schools were faced with a decision about whether they needed to make some teachers redundant.

3.2. Design concerns: divisiveness and attribution

A second theme mentioned by teachers who opted out of the trial concerns the design of the intervention or evaluation. One concern regards the approach the intervention used to determine the progress of students. For example, in secondary schools, four or five different teachers might teach the same pupil within a year, and it would therefore be very difficult to separate the impact of a single teacher on pupil performance. One headteacher said it was normal for pupils to progress between maths sets within the school year, and that the maths department had therefore objected to the basis on which the improved attainment of pupils would be attributed to a specific teacher. Though the calculation for awarding the incentive would have been adjusted in order to reflect the length of time teachers had spent teaching each pupil (see Box 1), either not all teachers knew this or some believed the adjustment would not provide an adequate solution. Furthermore, three teachers (one through the survey and two who were interviewed) believed that if a teacher teaches more than one class but only one class is measured, this could lead to gaming and a disproportionate focus on pupils within the trial. The incentive could then 'pull people in the wrong direction' and lead teachers to prioritise one class over another. This concern was anticipated by the evaluation team and the strategy was to collect data on all pupils taught by specific teachers to assess their performance relative to one another.

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¹⁰ One has to reflect that being paid for employment is a form of extrinsic reward, but the sentiment here relates to incentive payments specifically.

 $^{^{11}}$ The response reads: 'I find it incredibly insulting that there is some sort of suggestion that I might "try harder" if I were bribed with money.'

Another design concern is related to the randomisation component, and the fact that some teachers within the school would receive an incentive whereas others would not. Of the teachers who opted out of the trial, 71 per cent (46 of 65) believed that it would be unfair to randomise teachers into groups that would be treated differently. Six interviewees also pointed out that if the incentive was awarded to some teachers but not others, this could prove divisive, both because of the effect of randomisation and because not all teachers were eligible to participate in the trial: only those teaching the relevant year groups (Years 2–8), and only maths teachers in the case of secondary schools, had the opportunity to take part. One teacher said 'it just felt uncomfortable' that not everyone could participate, and 'it felt a little bit divisive'. There were thus important concerns about paying some staff extra to work harder but not others, connected to a belief this could breed resentment and jeopardise team cohesion. In the words of one headteacher, the incentive 'could drive a wedge between those who [would get] the financial incentive and those who [would not]'. It is important to reiterate that all teachers would be offered the opportunity to participate, but whether the right teachers were aware of this is debatable. In the next section we explore how the intervention was communicated.

3.3. Communication: the challenge of getting on the radar

One further reason for the low level of participation was related to the recruitment process, and more specifically whether the communication surrounding the intervention and trial was unclear, leaving teachers confused or misinformed, or failed to grab teachers' attention. The survey, documentary review and interviews suggest that communication was perceived to be clear by most respondents (though not all). In the survey of teachers who opted out of the trial, slightly more than half (44 of 69 respondents) indicated that they understood the project well. This finding was echoed in the interviews, with virtually all interviewees stating that they understood the project and that the communication was clear. Thus, most (though not all) teachers believed they understood the trial well enough to make an informed decision to opt in or opt out. In the words of one interviewee: 'we definitely had enough information by the time we answered'. The caveat to this finding is that although teachers reported understanding the project, this remains self-reported information and does necessarily mean that they understood fully how the incentive payments or the coaching would work. As one example, two interviewees either had not understood or misremembered how the randomisation and reward mechanisms would work. As another, three interviewees believed that the coaching component of the trial would have compromised the coaching programme already in place in their school, even though the intervention was intended to use existing coaching programmes in the schools, rather than to replace them with new programmes or prevent teachers already in a coaching programme from using it.

What is more problematic, however, is that not all teachers seem to have received the communications intended for them. Figure 2 provides an overview of the communication plan. Although the plan seems thorough, in practice it is questionable whether all teachers were informed. For example, one teacher who was interviewed said that only two of the four maths teachers at their school received the first academy trust email. Three interviewees reported that the trial was mentioned in a staff meeting and the headteacher took time to discuss it. Three other interviewees said there was no mention of the trial at any staff meeting, or that the project was only mentioned in passing. There were nine academy trust bulletins, but some scepticism was voiced by teachers about the extent to which teachers actually read these. Consequently, teachers might not have heard about the project, or not have heard enough

about it to catch their attention. It is also likely that, given the high workload of teachers, the trial was not always prioritised and was subsequently forgotten. In fact, four 12 survey respondents specified high workload as a reason for not signing up to the trial. It could thus have been that more teachers would have been interested in participating but they did not receive enough high-impact communication to actually sign up, or that sign-up was perceived as too burdensome.

2016 2017 June March Headteacher Recruitment of teachers begins Teachers Headteachers conference: notified that tria Email sent to eligible teachers (c.400) to April 2017 trust CEO is postponed from CEO introduces trial invite them to sign up until 2017/2018 encouraging school year sign up Conferences with i) primary school ·Heads begin to Trial is cancelled due headteachers and ii) maths heads of receive •46 teachers department. Conferences provided useful messages in to insufficient consultation with these groups and drove sign-up for regular bulletins the trial some changes in methodology / following this clarifications Heads asked to letter and identify potential emails November 2016 to March 2017 coaches in their schools •Trial introduced to potentially eligible teachers through emails, bulletins, webinars and informal communications

Figure 2. Trial recruitment and communications timeline

Note: Informal communications entailed telephone conversations between academy trust staff and some primary-school heads. These targeted phone calls sought to increase buy-in at final stages of the recruitment process.

Furthermore, the open-ended responses to the survey revealed that 25 of 69 individuals declined to participate in the trial because they did not meet the inclusion criteria or because they were leaving their schools. This shows the difficulties in targeting the right individuals with relevant information, as well as the common problem of turnover experienced by schools. Moreover, this finding also points to a limitation related to targeting eligible teachers. The documentary review revealed that it was difficult, if not impossible, to ensure that only eligible individuals would be contacted. The academy trust made use of its existing contact database, contacting everyone marked as a secondary maths teacher or as a primary teacher who appeared to be teaching KS1, KS2 or a non-specified year group. However, this database did not make it clear which year group a teacher would be teaching in the next academic year, or whether the teacher planned to leave their school. Given this limitation, it was not possible to know how many of the 401 potentially eligible teachers who were contacted were in practice eligible to participate.

3.4. The challenge of recruiting from a limited pool

We also found that assumptions by the academy trust regarding the number of schools and teachers that could be expected to sign up for the trial were too high. Teachers from fewer than half the schools in the academy trust agreed to participate. The protocol recognised 'there is a chance that not all schools will participate', but did not identify the risk that teachers would step forward from fewer than

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¹² Four out of 38 respondents to the open-ended survey question.

half the schools in the trust. Furthermore, almost a third of those who responded to the opt-out survey at the final stage of recruitment (25 of 83) considered themselves not eligible to take part in the trial. Some were not maths teachers, some knew they would be moving year groups and others taught years that were excluded from the trial.

The trial design was also affected by the constraint that there were fewer than 50 schools in the academy trust. This meant that randomisation at the level of schools or whole maths departments would not have yielded enough statistical power, and that a more complex randomisation at teacher level was ultimately selected. The findings of this research show that the proposed randomisation at teacher level led to concerns expressed by teachers about the potential unfairness or divisiveness of the trial, which themselves acted as a barrier to recruitment. Had the trial involved more schools, or multiple academy trusts for example, these problems might have been mitigated.

3.5. Appealing features of the study and other findings

In trying to learn lessons for recruiting teachers for studies in the future, it is important to consider factors that teachers identified as appealing about the study.

Six out of 13 interview respondents discussed coaching as an attractive feature of the study. There were exceptions, for example when schools already had a coaching scheme in place and felt that the coaching components of the study could compromise the existing coaching system.¹³ In addition, three respondents were concerned about the additional demands of weekly coaching on top of existing workload. As one teacher put it, 'people felt getting some coaching is always a good thing. The only negative element was the time the coaches [and coached] would have to put into it'. Of the teachers who opted out of the trial and participated in the survey, more than three-quarters (54 of 66) said they would like to receive coaching.

Despite being problematic to some, the financial incentive was a motivating factor to others. Three teachers who opted in noted that extra pay and extra resources for the school were key reasons to join the trial. The low turnout was likely not caused by the incentive being too small: in the survey, nearly 90 per cent (59 of 67) disagreed with the suggestion that the bonus was not large enough.

Three of the interviewees discussed the value they saw in contributing to research in schools. For example, one teacher who opted in said his main reason for deciding to participate in the study was that developers of the trial '[were trying to answer] an important question'.

3.6. Moving forward: teachers' suggestions for improvement

Interview participants were given the opportunity to provide suggestions on how to improve the trial recruitment and communication strategy. This yielded a number of interesting insights. Related to the use of incentives, for example, it seems that (for now) it would be difficult to overcome teachers' rejection of financial incentives, even with perfect communication. According to one interviewee, 'the feeling is that it can't be done – I am not sure how it [the incentive] can be done without being divisive'. Five interviewees considered that perceptions of the use of incentives might have been different had the financial incentive been made available to whole maths departments instead of only some teachers. This would have been seen as motivating and encouraging cooperation, rather than

14

¹³ This finding also reveals that teachers may have misunderstood the intervention, as it was intended to use existing coaching programmes in the schools rather than bringing in a new one. Neither would it have deprived teachers of coaching they were already receiving.

potentially divisive. It could also have been perceived as fairer, as it would have rewarded teachers for working together, rather than creating the risk of rewarding some teachers for the efforts of all. According to one headteacher, it would have been 'game on' if this had been the case. Some teachers also said they would have been attracted by the idea of contributing to scientific research if the topic of the research had been different.

With regard to the design of the study, teachers suggested that more attention could have been paid to correctly attributing the results to an intervention. It was believed that if one pupil or one class saw multiple teachers, of whom some were in the intervention and some in the control group, this would raise substantive measurement challenges. Reflecting on this as evaluators, weighting results and attributing fractions of effort would have made analysis much more complex. A more straightforward solution would be to randomise at the school level.

More attention could also have been given to the question of how to respond if schools were already receiving (part of) the incentive, in this case coaching. It seems there was confusion on how the coaching part of the incentive would work, especially for schools with an existing coaching scheme in place. If the control group within these schools risked no longer receiving coaching this might have made participation in the trial less attractive for teachers, but if the control group received coaching this might have undermined the study design.

In terms of communication, some teachers suggested that it could have been more frequent, since in some cases they only recalled receiving one email and a note during a staff meeting, for example (though a larger number of emails and bulletins had in fact been sent to potentially eligible teachers from the academy trust's head office). In the words of one interviewee, an email and a mention in a staff meeting 'is not enough for the project to stick'. Furthermore, more in-person information sessions would have been appreciated by some teachers, ¹⁴ since these would have demonstrated the commitment of the academy trust to engage with teachers and provided them with an opportunity to ask questions. Interestingly, such sessions were offered as part of the academy trust's package of communication to every school, but no teachers took up this offer and few seem to have been aware of it. The trust also offered webinars to introduce and explain the trial, but only two teachers signed up for these. Further consultation with headteachers was also suggested as a means to create buy-in and a climate of acceptance.

¹⁴ The documentary review revealed that in-person communications were primarily targeted at headteachers rather than teachers.

4. Conclusion and recommendations

4.1. Conclusions

This project set out to provide the reasons why potentially eligible teachers chose not to participate in the ICR trial. Based on a document review of the communication material, a survey for teachers who opted out of the study and interviews with headteachers and teachers who opted either in or out, this report has identified three categories of factors that seem most influential in teachers' decisions to participate or not.

Broadly speaking, teachers were mostly concerned with the principle of incentives and performance-related pay, with which some teachers agreed but others did not. A second factor, especially among teachers who opted out of the study, was a concern that the design of the intervention would give an incentive to some teachers within a school but not others. A third but less pressing factor related to the communication of the trial. These factors were similar both for teachers who opted in and those who opted out of the trial. This section summarises these factors and provides recommendations for future randomised control studies in schools, particularly those that will involve potentially controversial features, such as performance-related pay.

There were important aspects of the *design of the intervention and of the trial* that influenced teachers' decision to participate or not to participate in the study. One of the main reasons for the low teacher participation rate is that the cultural values held by a significant proportion of the target **teachers were strongly resistant to a financial incentive**. Many considered that asking teachers to work harder by giving them an incentive payment was insulting and inappropriate. Some described the teaching profession as having a 'moral purpose' and being motivated by things other than money. Many felt they worked as hard as possible already. In this context, teachers expressed a principled objection to performance-related pay in schools, including the tying of teacher performance to pupils' test scores, and considered the trial 'the thin end of the wedge' towards the widespread adoption of performance-related pay in schools. **These views were not universally held**: three teachers said they would have appreciated a monetary performance-related incentive. Nevertheless, these three teachers represented only a small minority.

Another often-mentioned reason for teachers not to participate was **the perceived unfairness and impact of a financial incentive that, due to the research design, would have been available to some teachers but not others. Many described such an incentive as divisive and felt it would undermine collaboration between maths teachers within the same department. Others felt the mechanism for assessing individual teachers' performance did not reflect real life, in which each pupil is taught by multiple maths teachers in the course of any one academic year.**

Some were also concerned about teachers in receipt of the incentive payment 'gaming the system' by focusing more attention on those children on whose test performance the retention of the

incentive would be decided, although this may have been based on a misunderstanding of how the incentive payments would work.

The above concerns do not mean that teachers object to all incentives. As factors motivating their participation in the trial, teachers reported interest in coaching, additional pay and resources for the school, and contribution to advancing education research. However, although a number of teachers reported interest in additional coaching and mentoring, many schools had existing coaching schemes. In addition, teachers were cautious about any additional demands that initiatives such as coaching might have placed on their time, unless there was protected time in their work day. This is an important consideration regarding how interventions work in practice. The findings suggest that coaching would have placed an immediate time demand on teachers, while this was not the case for the incentive component.

In relation to aspects of the recruitment that influenced teachers' decision to participate or not in the trial, the report also indicates that aspects of the communications strategy could have been refined. but that this was not the primary reason for under-recruitment. On the one hand, the CEO of the academy trust communicated his vision for the trial with clarity and passion at a launch meeting of all headteachers, expressing his enthusiasm for the chain's involvement in cutting-edge educational research. Some interview respondents shared this enthusiasm. On the other hand, we heard that there was little if any prior consultation with headteachers within the academy trust before this event, and it seems that many headteachers had dismissed the idea of participating in the trial in the course of informal conversations at the launch meeting. One headteacher suggested that, had the academy trust consulted more with its headteachers to test the intervention and trial design, it would have helped secure schools' buy-in. Furthermore, not all teachers were aware that they had the opportunity to participate. This may have been because a significant proportion of the schools' leadership teams chose not to communicate it further, having decided against participation at the school level. Not all maths teachers received the emails intended for them. Nevertheless, among those who made an active decision to participate or not, the majority reported that the information provided about the trial was clear enough for them to make an informed decision. The academy head office's commitment and communication were generally impressive although some refinements to the communication strategy could have improved participation rates.

Other reasons that influenced teachers' decision to participate or not in the trial were related to not meeting the study's inclusion criteria (not teaching the right cohort or not being a maths teacher); alternatively, teachers knew they would be leaving their schools in the next academic year. Finally, the assumptions made by the US academics in consultation with the academy trust at the outset of the intervention design, specifically regarding the number of schools and teachers that could be expected to sign up for the trial, were not realistic. Teachers from fewer than half of the schools that were members of the academy trust agreed to participate. The protocol recognised 'there is a chance that not all the schools will participate' but did not identify a risk that more than half might choose not to take part.

4.2. Recommendations

In light of existing mixed empirical evidence on the effects of performance-based compensation and coaching on teacher performance and pupil attainment, it is desirable to further our knowledge about these effects through future trials. This report identified aspects from the 'Motivating teachers with incentivised pay and coaching' trial which were and were not effective in attracting teachers to join

the project. Based on these findings, this section presents an overview of recommendations for the design and recruitment strategy of future trials.

A key issue is the *acceptability* of the intervention among the teacher population, which is in some aspects closely linked to the trial's *feasibility*. Based on these two elements, four recommendations can be made.

Communicating effectively and assessing acceptability

Carefully framing and targeting information for headteachers, senior staff and teachers about the trial during the recruitment process is vital. Therefore, it is advisable to have a clear strategy to first secure support for the trial from headteachers and heads of department who later cascade the information to their staff. Findings revealed that securing headteacher or senior buy-in is crucial to set the general mood for acceptability among teachers in a school. It would also be important to accompany this strategy with information specifically targeted to individual teachers. The information provided should help teachers understand the intricacies of the trial and clear up any misconceptions; ultimately improving the acceptability of a particular intervention. Measures could include hosting workshops for teachers together with bi-weekly teacher bulletins, rather than primarily providing information to headteachers. Furthermore, selecting teacher champions in schools to support the idea and disseminate information about the trial within their schools could potentially improve acceptability. Champions could be identified during the teacher workshops.

It is clear from this work that incentive payments will be controversial in the UK context for the time being, and may continue to be so. This project involved the leadership of an academy trust as a key collaborator and it brought useful insights into how to make the intervention as acceptable to teachers as possible. However, despite this, **additional consultation with the teachers and headteachers within the schools would have been beneficial**. If there is interest in pursuing this approach in the UK then we would recommend undertaking scoping work with teachers, headteachers and (crucially) unions. In particular, how the information about the trial is framed and conveyed will be important to avoid difficulties given the current attitude of unions to such incentive payments, an aspect that clearly requires further work.

Involve school practitioners when designing trials

Furthermore, we recommend testing feasibility prior to running a full randomised control trial to ensure that all of its elements are practically feasible to implement in schools. This may for example require piloting the trial – running a small-scale version of the main study that helps to test if all the parts work together – before it is fully rolled out.

Randomise at the school or department level

Given the controversy surrounding pay-based incentives, future trials should carefully consider the level of randomisation. From our findings, **randomising at the school or departmental level may be advisable** given the concerns about the divisive nature of the intervention design stated by interviewees and survey participants.¹⁵ The trade-off here is between increasing acceptability by treating departments as single units and the increased (potentially prohibitive) costs of the trial. As

¹⁵ The trust and developer/evaluation teams discussed including teachers of other subjects in the intervention design, but the complexity of having different subjects requiring different outcome tests prevented this.

most schools will have one maths department the challenge will be to recruit enough schools to make the trial viable in terms of statistical power. This means a greater cost overall if all teachers from intervention departments are given an incentive.

An alternative and potentially cheaper approach, but one that does not to our knowledge have an evidence-base, would be to award incentives to departments. If combined with emphasising the competition between incentivised schools in the trial, this could provide sufficient motivation for meaningful change in schools. A possible benefit is that the innovations arising from the trial could be evaluated in their own right.

Streamline internal checks and balances

We finally recommend that funders, developers, implementers and evaluators should meet iteratively as a team to discuss and resolve questions around a trial's design and feasibility. We realise this is the EEF's approach already, but in this trial the intervention had been originally developed in the United States. While it was adapted to the UK education system with input from a UK academy trust, there may have been substantive cultural and practical differences between the US and UK education systems that were not accounted for.

The different locations and time zones of the implementation and evaluation team also made collaboration more challenging. Further focus on key issues that underpinned the feasibility of the trial would have been beneficial, such as the challenge of recruiting enough schools and teachers given the size of the academy trust and the eligibility criteria for the trial.

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We would be grateful if you would answer a few questions about your reasons for choosing not to participate in this trial. Responses to these questions will be shared in an anonymised form with RAND Europe and the Education Endowment Foundation to inform the design of future research in the education sector.

1. I do not have a clear understanding of how the trial will work

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
11	33	20	5	14	69
16%	48%	29%	7%		

2. Awarding a bonus is not an appropriate way to incentivise teachers to make extra effort

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
7	18	19	25	14	69
10%	26%	28%	36%		

3. The bonus was not large enough

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
21	38	5	3	16	67
31%	57%	7%	4%		

4. Receiving a bonus that might have to be paid back would have caused stress

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
4	5	30	27	17	66
6%	8%	45%	41%		

5. I don't think teachers' rewards should be based on their pupils' test scores

'Motivating teachers with incentivised pay and coaching' randomised control trial (ICR trial)

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
3	10	20	35	15	68
4%	15%	29%	52%		

6. I do not want to receive coaching

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
14	40	8	4	17	66
21%	61%	12%	6%		

7. I don't think it's fair to randomise teachers into groups which will be treated differently

Strongly disagree	Disagree	Agree	Strongly agree	BLANK	Valid total
8	11	32	14	18	65
12%	17%	49%	22%		

8. There was another reason why I did not want to take part (please specify)

There were 38 open-ended answers. We coded these into the four categories below:

- Reason: Intervention design (Count =11)
- Reason: Do not meet inclusion criteria (Count = 15)
- Reason: Leaving (Count = 10)
- Reason: Other (Count = 4)
 - Please note that two of the 'Other' responses were input by the academy trust staff and are therefore not taken into account in the total number of people who completed the survey. These two individuals did not complete the survey but contacted the academy trust via email stating their decision not to participate but that they would be happy to be contacted to follow up on their reasons for their decision.

In order to maintain respondent anonymity we are not including the full survey responses to question 8 in this report. These may be shared upon request by the RAND team.

Appendix B – Interview protocols

1) HEADTEACHERS

Intro:

Hello, good afternoon, this is [name of interviewer]. I am a researcher from RAND Europe, for the interview we scheduled about the 'Incentives and Coaching Research Project' which was recently cancelled due to lack of participation.

Once again thanks for taking the time to talk to us. As we mentioned by email, we are working on a report for the Education Endowment Foundation to learn and inform future EEF studies. For this report, we are trying to find out more about the teacher recruitment process (for example, things that worked well and those that worked less well), as well as the reasons' behind teachers' decision to take part or not in the study.

Also we would like to remind you that your responses will be treated confidentially and reported anonymously, we will ensure that you cannot be identified in our report. The interview will not be recorded but I will be taking notes. This interview will take approximately 20 minutes but please know that you are free to withdraw from it at any point.

Do you have any questions before we start?

Date	
Time of interview	
Length of interview (in	
minutes)	
Interviewer	

Questions:

Question -Prompts Used?

General: To begin with, could you tell us a little bit about yourself? What is your role in your school and how long have you been there for?

[space for notes] [Yes/No]

Question 1: Could you tell us about how and when you first heard about the Incentives and Coaching research project?

- -What materials did you receive from the academy trust's head office?
- -Did you attend a workshop/info session?
- -Did you look for additional information in the academy trust's online intranet?

Question 2: What is your understanding of what this research project would involve?

- -What do you think about the information you were provided with? (Detailed or clear enough [for you to communicate it to your staff?])
 - ...what about the assignment of teachers? (that teachers would be allocated to different

groups?)

- ...how the coaching would work?
- ...how the monetary incentives would work?
- ...how change would be measured? (e.g. to measure pupil outcomes)
- -Do you feel you had clarity on how the intervention would work?
- -Did you share your stance (pro/against/neutral) on the project with your staff?

Question 3: Did you communicate the information about the research project you received to teachers in your school? If yes, when and how? How do you think the information was received by the teachers (generally positive or generally negative)? If not, why not? -Did you forward any of the information emails you received to teachers in your school?

-Did you organise a school meeting/info session to discuss this project? If yes, with whom? Or was it

discussed at a regular staff meeting?

[Next prompt applicable if they cascaded the information to teachers in their school]

-Was the way you communicated this to your staff similar or different to how you usually disseminate information in your school?

Question 4: What did you find appealing about the research project?

- -The idea behind the research topic i.e. improving pupil outcomes?
- -What about the monetary incentive or coaching?

Question 5: What, if anything, did you find less appealing about the research project?

- -Did you have any concerns about:
 - ...the incentive/performance-based pay? Bonus size?
 - ...the coaching component?
 - ...the project bringing additional 'workload'/'stress'?
 - ...how the project was presented/communicated to you?

[Next prompt applicable only if they say they cascaded information to their staff] Did you have any concerns about how the trial was going to be received in your school before communicating it to teachers?

- -Did this influence the way you communicated the information about the trial to your staff?
- -What do you think about teachers being placed (randomised) into different groups and receiving differential treatment?
 - -Did your school board discuss whether teachers should/shouldn't join the trial?

Question 6: What do you think could be done differently in similar future studies that focus on teachers (e.g. related to monetary incentives) to recruit more teachers?

- -What, if done differently, do you think could have encouraged more teachers to join the study?
- -What do you think about the way the information was communicated to you? Were you asked by the academy trust to communicate this information amongst your staff?
- -Do you have any suggestions on how similar research projects should be presented/communicated to teachers in the future?
- -Do you have any suggestions on how to make research on incentives (performance-based pay) acceptable/attractive to more teachers?
- -What about coaching?

Question 7: Finally, is there anything else which you would like to add that we didn't touch upon so far?

Once again, thanks for your time, this is all for now. We will let you know once the report is out. **END**

2) OPT-IN TEACHERS

Intro:

Hello, good afternoon, this is [name of interviewer]. I am a researcher from RAND Europe, for the interview we scheduled about the 'Incentives and Coaching Research Project' which was recently cancelled due to lack of participation.

Once again thanks for taking the time to talk to us. As we mentioned by email, we are working on a report for the Education Endowment Foundation to learn and inform future EEF studies. For this report, we are trying to find out more about the teacher recruitment process (for example, things that worked well and those that worked less well), as well as the reasons' behind teachers' decision to take part or not in the study.

Also we would like to remind you that your responses will be treated confidentially and reported anonymously, we will ensure that you cannot be identified in our report. The interview will not be recorded but I will be taking notes. This interview will take approximately 20 minutes but please know that you are free to withdraw from it at any point.

Do you have any questions before we start?

Date	
Time of interview	
Length of interview (in	
minutes)	
Interviewer	

Questions:

Question	Prompts
-Prompts	Used?

General: To begin with, could you tell us a little bit about yourself? What is your role in your school and how long have you been there for? [To double check,] did you opt-in or -out of the trial?

[space for notes] [Yes/No]

Question 1: Could you tell us about how and when you first heard about the Incentives and Coaching research project?

- -Did you receive any emails about it? From whom? (head/[school] office)
 - -Was there a meeting/info session about it in your school? e.g. mentioned in your staff meetings?
- -If you received bulletins (from your head), did you look for additional information in the academy trust's

intranet?

-Was this similar or different from other work communication you get?

Question 2: What is your understanding of what this research project would involve?

- -What do you think about the information you were provided with? (Detailed enough? Clear?)
- -Do you feel you understood well how the intervention would work?
- -What about the random assignment of teachers? (that teachers would be allocated to different groups?)
 - ...how the coaching would work?
 - ...how the monetary incentives would work?
- -How easy was the signup process?

Question 3: You decided to opt-in into this project. Can you please tell us what you found appealing about the research project?

- -The idea behind the research topic i.e. improving pupil outcomes? Coaching component? The monetary incentive?
- -Was there any discussion or collective agreement made at your school whether teachers should/shouldn't join the trial?

Question 4: What, if anything, did you find less appealing about the research project?

- -Did you have any concerns about:
 - ...the incentive/performance-based pay? Bonus size?
 - ...the coaching component?
 - ...the project bringing additional 'workload'/'stress'?

-Did you have any concerns about how the project was presented/communicated to you? -What do you think about teachers being randomly (by chance) placed into different groups for this study, with one group receiving the incentives and/or coaching and the other group not receiving the incentives and/or coaching? (differential treatment)	
Question 5: What do you think could be done differently in similar future studies with teachers? Do you have any suggestions on how the recruitment of teachers could be improved? -What, if done differently, do you think would have made more teachers join the study? -Are there any improvements that could be made in how the information is communicated to teachers? did you ever feel pressured by your head/Senior Leadership Team members to join? what did you think about receiving the letter from the CEO of [the academy trust]? -Do you have any suggestions on how to make research on incentives (performance-based pay) acceptable/attractive to (more) teachers? What about coaching?	
Question 6: Finally, is there anything else which you would like to add that we didn't touch u	pon so far?

Once again, thanks for your time, this is all for now. We will let you know once the report is out. $\ensuremath{\mathsf{END}}$

3) OPT-OUT TEACHERS

Intro:

Hello, good afternoon, this is [name of interviewer]. I am a researcher from RAND Europe, for the interview we scheduled about the 'Incentives and Coaching Research Project' which was recently cancelled due to lack of participation.

Once again thanks for taking the time to talk to us. As we mentioned by email, we are working on a report for the Education Endowment Foundation to learn and inform future EEF studies. For this report, we are trying to find out more about the teacher recruitment process (for example, things that worked well and those that worked less well), as well as the reasons' behind teachers' decision to take part or not in the study.

Also we would like to remind you that your responses will be treated confidentially and reported anonymously, we will ensure that you cannot be identified in our report. The interview will not be recorded but I will be taking notes. This interview will take approximately 20 minutes but please know that you are free to withdraw from it at any point.

Do you have any questions before we start?

Date	
Time of interview	
Length of interview (in	
minutes)	
Interviewer	

Questions:

Question -Prompts Used?

General: To begin with, could you tell us a little bit about yourself? What is your role in your school and how long have you been there for? [To double check,] did you opt-in or -out of the trial?

[Yes/No]

Question 1: Could you tell us about how and when you first heard about the Incentives and Coaching research project?

- -Did you receive any emails about it? From whom? (academy trust head office)
- -Was there a meeting/info session about it in your school? e.g. mentioned in your staff meetings?
- -If you received bulletins (from your head), did you look for additional information in the academy trust

intranet?

-Was this similar or different from other work communication you get?

Question 2: What is your understanding of what this research project would involve?

- -What do you think about the information you were provided with? (Detailed enough? Clear?)
- -Do you feel you understood well how the intervention would work?
 - ...what about the random assignment of teachers? (that teachers would be allocated to different groups?)
 - ...how the coaching would work?
 - ...how the monetary incentives would work?

Question 3: You decided to opt-out from this project. What influenced your choice? Could you tell us if there was anything in particular that you found challenging or unappealing about the project?

- -Did you have any concerns about:
 - ...the incentive/performance-based pay? Bonus size?
 - ...the coaching component?
 - ...the project bringing additional 'workload'/'stress'?
 - ...how the project was presented/communicated to you?
- -What do you think about teachers being randomly (by chance) placed into different groups for this study, with one group receiving the incentives and/or coaching and the other group not receiving the incentives and/or coaching (differential treatment)?
- -Was it agreed at your school board that teachers should not join the trial?

Question 4: Despite your decision to opt-out from this project, was there anything you found appealing about the research project? -The idea behind the research topic i.e. improving pupil outcomes? -What about the monetary incentive or coaching? Question 5: What do you think could be done differently in similar future studies that focus on teachers? Is there anything which, if done differently, would have encouraged you to join the trial? -What do you think about the way the information was communicated to you? ...did you ever feel pressured by your head/Senior Leadership Team members to join? ...what did you think about receiving the letter from the CEO of the academy trust? -If you would be involved in this project what would you have done differently to communicate the information about this project? -Do you have any suggestions on how to make research on incentives (performance-based pay) acceptable/attractive to (more) teachers? What about coaching? Question 6: Finally, is there anything else which you would like to add that we didn't touch upon so far?

Once again, thanks for your time, this is all for now. We will let you know once the report is out. END