Department for Education

Evaluation of the National Tutoring Programme Year 3 Study Plan

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Government Social Research

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Project information

Project Information	Details
Project title	Evaluation of the National Tutoring Programme Year 3
Evaluator (institution)	NFER
Principal investigator(s)	Stephen Welbourne
Study plan author(s)	Stephen Welbourne, Andrew Smith, Chris Morton, Ruth Staunton, Pippa Lord, Sarah Lynch and Katherine Aston
Study design	Programme evaluation, including IPE and a quasi-experimental (QED) impact evaluation
Pupil age range and Key stage	The evaluation explores outcomes for pupils in Year 6 (Key Stage 2) and Year 11 (Key Stage 4) in 2022-23.
Number of schools	For impact of the NTP in 2022-23 this is population analysis (schools in which a minimum threshold proportion of Y6 or Y11 pupils were tutored in 2022/23).
Number of pupils	For impact of the NTP in 2022-23 this is population analysis (all pupils, PP or PLA pupils in Year 6 and Year 11).
Intervention	The National Tutoring Programme 2022-23: Tuition Partners; Academic Mentors; and School-Led Tutoring
Primary outcome measure and source	2022-23 attainment in English and maths: Key Stage 2 and GCSE data in NPD
Secondary outcome measure and source	Not applicable

Programme summary

Aspect	Description
Programme	The NTP is an important part of the Government's Covid-19 recovery response, supporting schools to respond to the disruption to education caused by the pandemic. It aims to provide targeted tuition support to disadvantaged pupils in Years 1-11 who have been hit hardest by this disruption. The programme aims to increase the supply and delivery of high-quality tutoring and mentoring, particularly in disadvantaged areas, and improve progress for disadvantaged pupils. There are three routes of support for pupils via the NTP: Tuition Partners (TPs); Academic Mentors (AMs); and School-Led Tutoring (SLT). For primary school pupils, tutoring can be given in mathematics, English and science. For secondary school pupils, it can be provided in mathematics, English, science, humanities and modern foreign languages. Alternative tutoring interventions are available for pupils with special educational needs and disabilities (SEND). A new delivery model is in place in the NTP's third year (2022-23). In March 2022, the Department for Education (DfE) announced plans to simplify the programme by providing £349 million of core tutoring funding directly to schools and giving them the freedom to decide how best to provide tutoring for their pupils. The DfE is providing central guidance and customer support for schools (including to find tutoring providers). New delivery partners will provide training for tutors (Education Development Trust), will recruit and deploy academic mentors (Cognition Education), and will quality assure tuition partners (Tribal Group). More information about the NTP can be found in the DfE guidance for schools for 2022-23.
Why (rationale)	Evidence indicates that small-group tuition can be effective in producing accelerated learning and can be particularly effective for disadvantaged pupils (Nickow, Oreopoulos and Quan, 2020; EEF, 2018a, 2018b; Torgerson et al., 2018; Dietrichson et al, 2017).
Who (recipients)	The programme aims to benefit disadvantaged pupils and those who have most fallen behind in their learning as a result of Covid-19 disruption. In 2022-23, schools should prioritise Pupil Premium pupils but can include other pupils if considered appropriate.
What (materials)	Funding is allocated based on the number of pupils eligible for Pupil Premium in the school. In 2022-23, DfE is providing schools with a

Aspect	Description
	subsidy of 60% of the cost of tutoring, meaning schools will be required to pay the remaining 40% from other funding streams e.g., Pupil Premium budget.
What (procedures)	Tuition Partners are external tutoring organisations that provide tutors to deliver online or face-to-face tuition to pupils. They provide schools with tutors who offer specialisms, including SEND. In 2022-23, quality assurance of tuition partners is managed by DfE's delivery partner, Tribal Group. Academic Mentors are salaried members of school staff who work alongside teachers to provide focused, small group tuition. DfE's delivery partner, Cognition Education, selects academic mentors and matches them to schools, based on skills and experience. Academic Mentors must meet both of the following qualification requirements: • 3 A levels at grade A* to C or the equivalent, such as BTECs or T Levels • GCSE English and mathematics at grade 4 or C, or above Academic Mentors undergo intensive training with Education Development Trust before being placed in a school. School-Led Tutoring offers flexibility for schools to use their own staff to provide tutoring. Schools can use existing staff or staff newly engaged for this purpose, such as retired teachers, supply teachers or support staff. School staff can complete free training with Education Development Trust to prepare them to deliver tutoring. This is mandatory for SLT tutors, except those with qualified teacher status or those who completed NTP training in a previous year.
Who (provider)	Tuition Partners, quality assured by Tribal Group, provide tutors to schools for the tuition partners route. Schools must use tuition partners on DfE's approved list. Academic Mentors are recruited by Cognitive Education and trained by Education Development Trust. Academic Mentors are employed by the school. Schools can use existing staff or staff newly engaged for school-led tutoring (including retired teachers, supply teachers or support staff). Training is available from Education Development Trust.

Aspect	Description
How (format)	Small groups of 1:3 are recommended in order to maintain high-quality and impactful tuition, with the maximum permitted tutor-pupil ratio being 1:6. Tuition can take place in-person or online.
Where (location)	State-maintained primary, secondary and special schools in England.
When and how much (dosage)	Year 3 of the NTP is being delivered in the 2022/23 academic year. For each route of support, it is advised that tutoring courses should be 12 to 15 hours long to have a meaningful impact on pupil attainment. Tuition should be organised at an appropriate time for pupils to encourage high attendance. Schools must ensure pupils still have access to the full curriculum.
Tailoring (adaptation of the programme)	None to date.

Context in schools: Tutoring and the attainment gap

This section sets out the rationale for the National Tutoring Programme (NTP) in the context of the socioeconomic attainment gap, which has widened during the Covid-19 pandemic. We go on to outline the evidence for the effectiveness of tutoring as a learning tool. Finally, we identify the key features of tutoring identified in the literature as contributing to effective learning.

The socioeconomic attainment gap refers to the differences in educational attainment between more and less socioeconomically affluent pupils. The Department for Education measures the attainment gap using a disadvantage gap index, which compares the mean rank of pupils in the disadvantaged group (based on Free School Meal eligibility) with the mean rank of other pupils.[1,2,3] For primary pupils, it is based on Key Stage 2 assessments in reading and maths. For secondary pupils, it is based on GCSE grades in English and maths.

Before the Covid-19 pandemic, the disadvantage gap index for primary pupils was decreasing over time, from 3.23 in 2012 to 2.91 in 2019. By 2022, the disadvantage gap index had widened back to 3.23, the highest level since 2012.[4] While attainment fell for both disadvantaged pupils and other pupils, it fell further for disadvantaged pupils, widening the gap. For secondary pupils, the disadvantage gap index was already widening before the pandemic, rising from 3.66 in 2017 to 3.70 in 2019. The gap widened further in the pandemic, to 3.84 in 2022, the highest level since 2012.[3]

It is important to note that the disadvantage gap prior to Covid was at least twice as large as the impact of Covid on attainment. However, the widening disadvantage gaps suggest that disrupted learning during the Covid-19 pandemic had a disproportionate impact on disadvantaged pupils. This reflects evidence that disadvantaged pupils experienced greater learning loss during school closures. Disadvantaged pupils are estimated to have missed 11% more learning time during periods of lockdown than their non-disadvantaged counterparts (Elliot Major et al., 2021). Similarly, during periods of school closure in 2019/20, pupils in schools serving the highest proportions of disadvantaged pupils were more likely to be withdrawn from school before closures and less likely to return immediately when schools were allowed to reopen. They were less likely to return set work or have contact with their teachers, curriculum coverage was poorer; and they had lower levels of parental support and IT access (Nelson and Sharp, 2020). Considering primary attainment in reading and maths, several studies showed a widening disadvantage gap after periods of school closure (Twist, Jones and Treleaven, 2022).

[1] The disadvantage gap index has a value between -10 and +10, where 0 indicates an equal distribution of scores, and a larger value indicates a larger attainment gap.
[2] Methodology - Key Stage 2 attainment
[3] Academic Year 2021/22 Key Stage 4 attainment
[4] Academic Year 2021/22 Key Stage 2 attainment

The academic year 2022/23 is the third year of the NTP programme. As in previous years, the programme aims to provide targeted tuition support for disadvantaged pupils. However, the focus has shifted from mitigating learning losses from the Covid-19 pandemic, to tackling the persistent socioeconomic attainment gap. The programme also aims to help create a sustainable tutoring market which schools can use to access high quality tutoring going forward. The overall aim of the programme is to establish tutoring as an effective tool for schools to help disadvantaged pupils and reduce the attainment gap.

Evidence for small group tuition

There is a large body of evidence that small-group tuition is effective, particularly where it is targeted at pupils' specific needs. The EEF toolkit pages on small group tuition show that it can be an effective intervention, and that training and support are important in the effectiveness of the tuition. Effect sizes vary across studies, with an average impact of two months additional progress for secondary schools and four months additional progress for primary schools. A key finding is that the smaller the group and the more aligned it is to pupils' needs, the more effective the intervention. The EEF highlighted tuition as an important route for supporting disadvantaged pupils whose learning was disrupted during the Covid-19 pandemic.

Meta-analyses have shown that tutoring programmes yield consistent and substantial positive impacts on learning outcomes: the EEF Teaching and Learning Toolkit meta-analysis estimates the average effect size of tutoring to be 0.3 SD for small group tuition and 0.37 SD for 1:1 tuition; Nickow et al., (2020) found an overall pooled effect size estimate of 0.37 SD; Dietrichson et al., (2017) found a pooled effect size of 0.36 SD; and Ritter et al., (2009) found a pooled effect size of 0.30 SD.

Particular benefits of tutoring for disadvantaged students

There is evidence to suggest that the advantages of small group tuition may be particularly relevant for disadvantaged pupils (Dietrichson et al., 2017; Torgerson et al., 2018). These pupils may suffer in the classroom due to comparison to their peers. A perceived sense of failure may result in low motivation and low self-efficacy, leading to poor learning outcomes. In contrast, teaching these pupils in homogenous small groups allows favourable comparisons between pupils and allows teachers to readily communicate pupil improvements (Mischo and Haag, 2002). These incentives, in turn, help maintain high levels of motivation (Pintrich and Schunk, 2002).

In the evaluation of the first year of the NTP, secondary schools which tutored more than 70% of Pupil Premium-eligible pupils in the Tuition Partners programme showed a positive impact on Year 11 Teacher Assessed Grades in English and maths (Lord et al., 2022).

The evaluation of the second year of NTP evaluated both school and pupil level effects. Although Pupil Premium-eligible pupils were preferentially selected for tutoring they formed less than 50% of the tutored pupils. The evaluation found a consistent pattern of evidence at both school and pupil level to suggest that participation in SLT was associated with small improvements in Key Stage 2 and Key Stage 4 maths outcomes. There was also some more limited evidence at school level only that participation in SLT was associated with small improvements in Key Stage 2 and Key Stage 4 English outcomes. In all cases the effect sizes were small and equated to one months' additional

progress or less. The evaluation did not detect any evidence that participation in AM/TP led to improvements in KS2 or KS4 English or maths outcomes at either school or pupil level. Outcomes for Pupil Premium-eligible pupils were similar to those for other pupils selected for tutoring (Lucas et al., 2023).

This section of the study plan identifies the importance of certain delivery features and structures for effective tutoring. The clear message from the research is that for optimal results, tutoring needs to be high quality, with sessions having sufficient duration and frequency. More tutoring hours are associated with greater impact on attainment. Tutors should have strong subject knowledge and pedagogic expertise. Tutoring should be additional to classroom teaching (rather than substitute for it), aligned with classroom learning and focus on pupils' learning needs.

Tutoring seems to work best when delivered regularly (e.g. at least weekly), and over a period of time (e.g. fora term). The evaluation of the first year of the NTP Tuition Partners programme found that attending more sessions was related to better outcomes (Lord et al., 2022) (for more details see the section below on duration and frequency).

Tutor subject knowledge and pedagogic expertise

The literature suggests tutor subject knowledge is beneficial for learning outcomes. Skilled teaching requires a complex interrelationship between knowledge of lesson structure and subject matter (Leinhardt and Greeno, 1986). Tutors with strong subject knowledge are more likely to be able to communicate that knowledge effectively to pupils. But learning can still occur where it is not present, for example, when tutors are peers or volunteers (Fantuzzo, King and Heller, 1992; Rogoff, 1990). Therefore, although tutor subject knowledge should not be considered a prerequisite for tutorial learning it is clearly advantageous and preferable to it not being present at all.

The pedagogic expertise that tutors use to facilitate learning is widely acknowledged in the literature as important. In particular, tutoring that exploits the intimate environment offered by small group tutorials is likely to be highly effective (Collins and Stevens, 1982). In this sense, tutorials should be an interactive rather than a didactic experience between tutor and student (Lepper, Drake and O'Donnell-Johnson, 1997; Lepper and Woolverton, 2002). Tutors should make the tutorial a learning conversation in which students contribute much of the dialogue and the tutor intervenes appropriately to guide learning (Education Endowment Foundation, 2018a; McArthur, Stasz and Zmuidzinas, 1990; Merrill et al., 1992). Among the most important pedagogic principles identified is the idea of tutors managing conversations that encourage active learning from students (Chi et al., 2001). Ideally, students should be at the centre of these learning conversations, encouraged to explain their answers and ask questions and with tutors holding back from giving detailed explanations. Tutors should also use this conversational style to probe students' understanding of content. For example, this could include tutors using comprehension-gauging questions rather than accepting a pupil's own assessment of their understanding.

In their review of tutoring, Ofsted (2022) judged tutoring sessions delivered by qualified teachers to be particularly high in quality compared with other tutoring. They highlighted teachers' secure subject knowledge, adaptation of content and teaching to support pupils' learning, knowledge of the broader curriculum sequence, and effective formative assessment as features which contributed to their effective tutoring.

Relationship with classroom learning and pupils' needs

An issue of concern in the literature is how targeted school interventions such as tutoring relate to wider school learning. Research suggests that learning is more effective when tutoring is linked with regular classroom teaching (Education Endowment Foundation, 2018). The tutoring pupils receive should be closely aligned with what is being taught in regular classes, e.g. by providing remedial support on difficult topics. The coordination of tutoring and classroom teaching should be fostered by a close and supportive relationship between tutor and teacher.

Similarly, tutoring is more effective when it is targeted to pupils' specific needs in learning, such as gaps in their knowledge and understanding (Education Endowment Foundation, 2018). Diagnostic assessment can be used to decide how to target tuition, both before and during tutoring.

Ofsted identified two approaches that NTP schools were using to design their tutoring curriculum (Ofsted, 2022). The first approach was to use diagnostic assessment to establish missing knowledge or concepts for each pupil, and target tutoring to these learning gaps. The other approach was to focus on core concepts from the school's curriculum, to develop or consolidate this fundamental knowledge.

Duration and Frequency

There is considerable focus in the literature on the most effective format for sessions. This relates to the frequency and duration of sessions as well as when interventions take place in school. The clear message in the literature is that the format of tutoring has an important impact on the effectiveness of academic mentoring (Education Endowment Foundation, 2018). Short, regular sessions (30-40 minutes, three to five times a week) over a term or more appear to result in optimum impact (Smyth, 2008).

Evaluation of year 1 of the NTP Tuition Partners programme showed that for secondary English, secondary maths and primary English, attending more sessions (hours) was associated with higher attainment. For primary maths, the number of hours of tutoring was not associated with attainment, but that intensity (i.e. greater frequency of sessions in a short time period) was associated with higher attainment (Lord et al., 2022). The evaluation of year 2 of the NTP found that higher number of tutoring hours was associated with better English and maths outcomes for School-Led Tutoring but this was not the case for the other NTP routes (Lucas et al., 2023).

Studies in other contexts also demonstrate learning benefits from extended periods of academic mentoring. For example, one study found that students receiving less than 20 hours tutoring scored 1 grade point higher than non-participants and those who had received more than 20 hours tuition scored 1.8 points higher than those who had no tuition (Smyth, 2008). Also, the 20 week programmes Every Child a Reader and Every

Child a Writer both showed larger achievement gains than the 10 hours of tuition provided through the Making Good Progress (Tanner et al., 2011). Studies suggest that intensive tutoring, where sessions are held several times a week tend to have greater impact (Elbaum et al., 2000).

About the evaluation

Evaluation aims

The overall aims are to evaluate: how successful the NTP model is in 2022-23; how embedded tuition is in the school system; whether the programme has supported pupils with SEND; the overall perceived benefits of the NTP; and the impact of the NTP on attainment outcomes.

Research Questions

The research questions relate to both the implementation and impact of the NTP in the third year of the programme (2022-23), as listed below.

Implementation and Process Evaluation (IPE) research questions

RQ1: How successful was the implementation of the NTP year 3 model?

- How are schools implementing the NTP in year 3? What models of delivery are they adopting?
- What types of support have schools sought from the DfE and its delivery partners (Education Development Trust, Tribal Group and Cognition Education)? How successful have these support services been?
- How effective was the quality-assurance process for TPs? Have schools been able to access high-quality TPs and tutors?
- How successful was the NTP in recruiting and deploying AMs? Have schools been able to access high-quality mentors?
- How effective is the training package for tutors in 2022-23 perceived to be in equipping them for their roles?
- What improvements could be made to any of the services available?

RQ2: To what extent is the NTP embedding tuition within the school system?

- To what extent is tutoring (including NTP tutoring) embedded in schools e.g., is tutoring a permanent feature in the school system? If so, how is tutoring embedded?
- To what extent is the tutoring market perceived to meet demand and allow for tutoring to be embedded in the school system? What is the perceived impact of the NTP on the supply and delivery of high-quality tutoring?
- To what extent does the NTP funding mean schools are offering tutoring over and above previous provision? What is the added value of the NTP?

- To what extent is NTP tutoring aligned to the curriculum and learning needs of pupils?
- How are schools funding the NTP? What impact, if any, is the reduced subsidy having on school budgets and the tutoring offer in schools?
- What are the enablers and barriers to embedding tutoring in schools?

RQ3: To what extent has the NTP supported pupils with SEND?

- How are schools (mainstream and special schools) delivering the NTP to pupils with SEND?
- Have schools been able to access specialist providers?
- To what extent has provision been tailored for individual needs, aligned with each pupil's education, health and care plans (EHCPs)?
- How could NTP provision for SEND schools and pupils be more effective?

RQ4: What are the perceived benefits of the NTP?

- Is the NTP perceived to help pupils catch up with their lost learning and close the attainment gap for disadvantaged pupils?
- What are other perceived impacts of the NTP on pupils?
- What are the perceived enablers and barriers associated with the NTP having most benefit?
- Do perceptions of benefits and impact vary by route of tuition or different delivery models adopted by schools (e.g. different group sizes, mode of delivery, and timing of tuition)?

Impact research questions

RQ5: What is the impact of the NTP delivered in 2022/23 on the educational attainment outcomes (in maths and English) of pupils who are in Year 6 and Year 11 in 2022/23?

- RQ5.1: for all pupils? (school-level impact estimates)
- RQ5.2: for pupils eligible for pupil premium (PP)? (school-level impact estimates)
- RQ5.3: for pupils with lower prior attainment than the expected standard (PLA)? (school-level impact estimates)
- RQ5.4: for all tutored pupils? (pupil-level impact estimates)
- RQ5.5: for tutored PP pupils? (pupil-level impact estimates)
- RQ5.6: for tutored PLA pupils? (pupil-level impact estimates)

- RQ5.7: how do these impacts vary by pupil characteristics and region? (school-level impact estimates)
- RQ5.8: how does the impact of tutoring vary with dosage? (pupil-level impact estimate).

RQ6: What is the impact of the NTP delivered in the prior year (2021/22) on the educational attainment outcomes (in maths and English) of pupils who are in Year 6 and Year 11 in 2022/23?

- RQ6.1: for all pupils? (school-level impact estimates)
- RQ6.2: for pupils eligible for pupil premium (PP)? (school-level impact estimates)
- RQ6.3: for pupils with lower prior attainment than the expected standard (PLA)? (school-level impact estimates)

Impact evaluation

Programme impacts will be estimated using quasi-experimental methods similar to those employed in the impact evaluations of the NTP in 2020/21 and 2021/22.

- **School-level** analysis will estimate the impact of the NTP on the educational attainment outcomes of all pupils, PP pupils, and PLA pupils in Year 6 and Year 11 in the 2022/23 academic year, *whether or not they were tutored* (RQ5.1, RQ5.2, RQ5.3). Where data of sufficient quality is available, this analysis will consider variation in impacts by pupil characteristics and school region (RQ5.7). The school-level impact estimates will also consider the **long-term impacts** of tutoring for pupils in Year 6 and Year 11 in 2022/23, where tutoring was available in schools in the prior year of the programme (2021/22; RQ6.1 – RQ6.3).
- **Pupil-level** analysis will address the impact of the NTP on the educational attainment outcomes of tutored pupils who are in Year 6 and Year 11 in the 2022/23 academic year (RQ5.4 - RQ5.6), where these pupils were tutored in the previous academic year. It will also explore the effect of different amounts of tutoring received by these pupils (dosage analysis RQ5.8).

The evaluation of the first year of the NTP highlighted a number of methodological challenges resulting from the nature of the selection of pupils to receive tutoring (Lord et al., 2022). These challenges persisted in the second year of the evaluation, and also feature in the evaluation of the third year of the NTP. They relate to:

- **dilution** - not all pupils in the school-level analyses will have received tutoring; a majority may have been untutored. High levels of dilution in the first two years of the programme posed a problem for impact estimates by reducing the school level effect sizes. It is anticipated that this will continue to be a challenge in year three – perhaps more so as the government contribution to support tutoring is lower. Furthermore an additional dimension of dilution is present as the subject in which pupils received tutoring is not recorded in the NPD.
- **pupil-level selection bias** - schools are able to select pupils who they feel would benefit from tuition. The pupil selection mechanism is therefore partially based on criteria that are unknown (at the individual pupil level) and unavailable to this evaluation. In addition, the criteria for selecting pupils vary across schools. The implication for the evaluations of the first two years of the programme has been that it has not been possible to create a valid comparison group of untutored pupils. In previous years we attempted to build a predictive model that would allow us to identify pupils in non-tutoring schools who would have been likely to be selected for tutoring. However,

these models did not perform well enough to be considered a reliable basis for constructing a comparison group.

Given these likely challenges, the impact evaluation will be shaped by a preliminary analysis of the data, with decisions about the most appropriate subsequent analyses depending on:

- the number of schools opting out of the NTP in 2022/23;
- numbers of pupils (and specifically PP and PLA pupils) being tutored (pupil participation);
- the number of pupils selected for tutoring in Years 2 and 3 of the NTP (the intervention group for pupil-level analyses) compared with the number selected for tutoring in Year 2, but whose school did not take part in Year 3 of the NTP (these pupils will be eligible for inclusion in comparison groups).

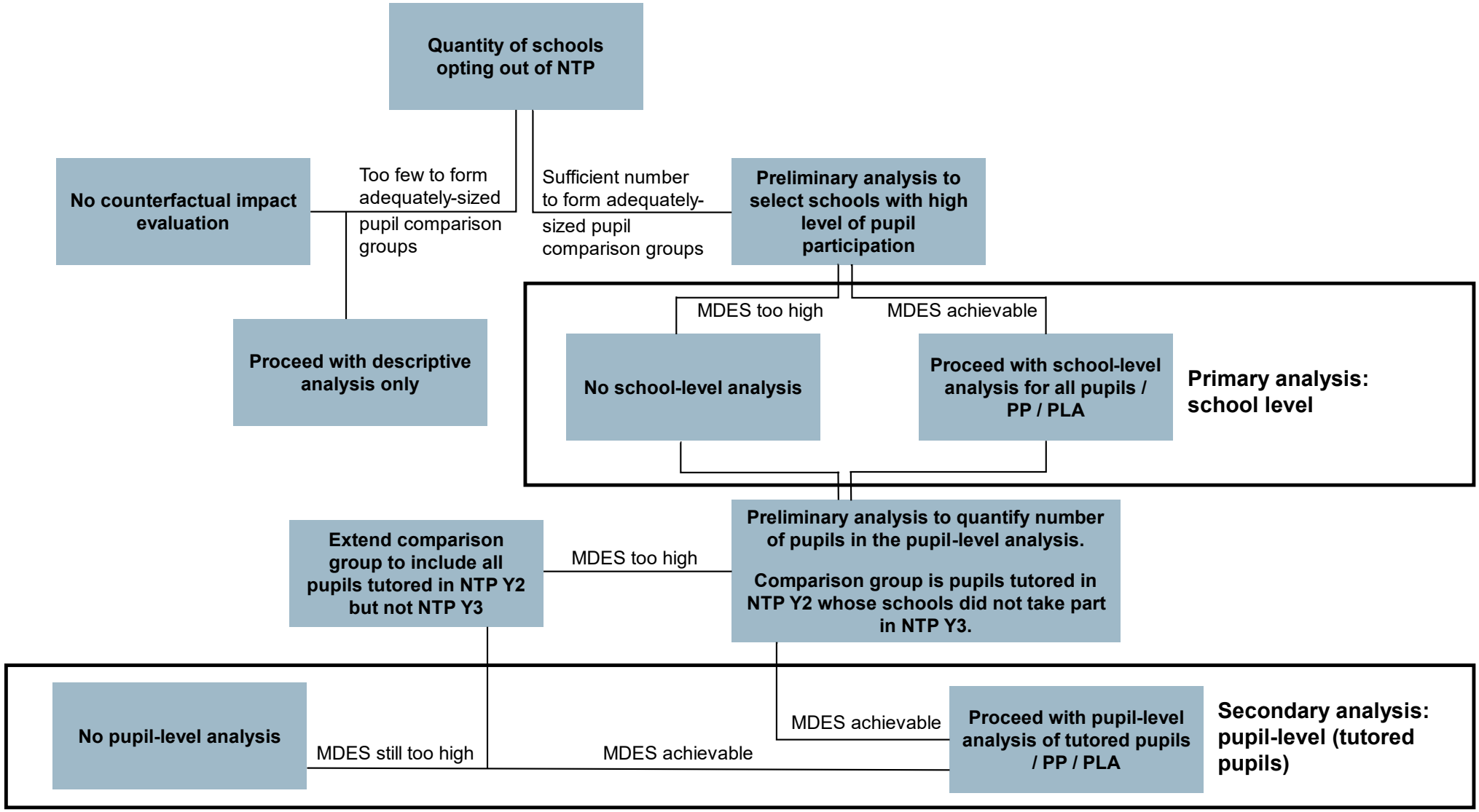
The impact evaluation of Year 3 of the NTP will not use a predictive model to attempt to select a comparison group for the pupil-level analysis (pupils who were likely to have been tutored if their school had participated in the NTP). This model was not successful in the first two years of NTP evaluation due to pupil selection into tutoring on unobservable characteristics. Therefore, additional analysis was carried out in Year 2 to attempt to avoid the selection bias by restricting the pupil-level analysis to those tutored pupils who had previously been selected for tutoring in the academic year immediately prior (iii above). Additionally the comparison group for this pupil-level analysis will be restricted to pupils whose schools are not taking part in NTP Year 3. Our proposed evaluation design for Year 3 of the NTP follows the same design concept. Figure 1 below outlines these elements of the preliminary analysis (blue boxes) – see also ‘Analysis for the impact evaluation’ section for further details.

If the number of schools opting out of the NTP is too few to form adequately-sized pupil comparison groups then there will be no counterfactual impact evaluation and only descriptive analysis. If there is a sufficient number to form adequately-sized comparison groups then a counterfactual impact evaluation will go ahead.

Preliminary analysis will be undertaken to select schools with higher levels of pupil participation. If we discover that the minimum detectable effect size (MDES) is too high, there will be no school-level analysis, but if the MDES is achievable we will proceed with school-level analysis.

Preliminary analysis will also be carried out to quantify the number of pupils for pupil-level analysis. The comparison group is pupils tutored in NTP Year 2 whose schools did not take part in NTP Year 3. If the MDES is too high, we will extend the comparison group to include all pupils tutored in NTP Year 2 but not NTP Year 3. If the MDES is still too high there will be no pupil-level analysis. If the MDES is achievable, we will proceed with the pupil-level analysis.

Figure 1 Impact evaluation decision tree



Data sources

The impact evaluation will use the following data sources so that analysis may be undertaken within the Secure Research Service (SRS):

- **National Pupil Database**, to identify pupils who have received tutoring in 2022/23 (and 2021/22 for the SLT route), and thereby intervention and comparison schools. NPD data will also include some information about dosage in the form of the number of hours' tutoring pupils have received (from school census data), but not the route nor subject[5], neither of which are collected in 2022/23, and are hence unavailable for this academic year in any source of data being used by the impact evaluation. NPD data will also provide pupil characteristics, therefore identifying PP and PLA pupils, and include KS2 and KS4 attainment outcome data (in addition to KS1 and KS2 baseline data).
- **DfE's NTP archive**, to identify pupils in Years 6 and 11 in 2022/23 and who were tutored in the AM and TP routes for year 2 of the programme (2021/22, when they were in Years 5 and 10).
- **School-level characteristics,** supplied by NFER and derived from DfE's publicly available 'Get Information about Schools' database, to understand the composition of schools in the sample, for school-level covariates.
- **NFER's IPE survey data** describing the importance of criteria used by schools to select pupils for tuition in 2022/23. This data is not available for all intervention schools and will not be ingested into the SRS. We have however used it to better understand the pupil-level selection mechanism (see 'Pupil-level impact estimates: methodology' section below).

DfE will match data from sources listed above so that a pupil-level dataset is available in the SRS for analysis. Following completion of the 2022/23 impact evaluation, the evaluation data will be archived.

Outcome measures

In addition to the 2022/23 outcomes as the basis for impact estimates, national assessment data from an earlier stage in each pupil's schooling will be incorporated in order to provide a baseline level of attainment for inclusion as a covariate in analyses:

[5] The lack of data about the subject in which a pupil was tutored will further add to dilution (as attainment outcomes are subject-specific).

Table 1 Outcome measures

	Baseline	Outcome
Year 6	KS1 Maths (2018/19)	KS2 Maths (2022/23)
Year 6	KS1 Reading (2018/19)	KS2 Reading (2022/23)
Year 11	KS2 Maths (2017/18)	KS4 Maths (2022/23)
Year 11	KS2 Reading (2017/18)	KS4 English (2022/23)

School-level impact estimates: methodology

School-level analysis estimates the impact of the NTP on the educational attainment outcomes of all pupils, PP pupils, and PLA pupils who are in Year 6 and Year 11 in the 2022/23 academic year, *whether or not they were tutored.* It will also address variation in impacts associated with pupil and school characteristics.

This approach, by analysing all eligible rather than tutored pupils, offers the advantage of avoiding the problem of pupil-level selection bias. It does however introduce the problem of dilution. This is because although all pupils (and subgroups of PP and PLA pupils) may be the intended recipients of the NTP, a minority of these may in fact actually receive tutoring[6], thus contributing to under-estimating the treatment effect by including pupils who were not tutored. In addition we expect further dilution as tuition subject data is not available at the pupil level in the 2022/23 data. This means that some pupils included in this analysis will not have been tutored in the subject which is being used as the outcome measure.

We have therefore proposed a preliminary analysis to understand the dilution effect and to select schools with higher levels of pupil participation for inclusion in analysis. The total sample size for the impact evaluation is reasonably fixed as the intention is to include all mainstream primary and secondary schools in England. It is known that the majority of state-funded schools have accessed some form of tutoring[7], although the route of tutoring (Academic Mentors, Tuition Partners, School Led Tutoring) will be unknown in the evaluation of year 3 of the NTP (2022/23). For a counterfactual

[6] For the Year 2 evaluation 35% (KS2) and 39% (KS4) of pupils at participating schools took the SLT route themselves. The percentage receiving tutoring in English or maths specifically would be lower than this.
[7] https://explore-education-statistics.service.gov.uk/find-statistics/national-tutoring-programme

impact evaluation to proceed as planned will require enough schools opting out of the NTP in 2022/23 to form adequately-sized pupil comparison groups[8].

At the time of writing this study plan unknown factors in the estimation of the Minimum Detectable Effect Size (MDES) include the proportion of schools that will be in the intervention group and the proportion of pupils within the intervention schools who will receive tuition.

When we undertake preliminary analysis using final school and pupil data we will use actual numbers of schools in the intervention and comparison groups to better inform dilution estimates. We will restrict analysis to schools with a minimum proportion of pupil participation (less dilution) (see risk section), comparing their characteristics to those of all NTP schools. We will proceed to estimate impacts for all groups (e.g. all pupils, PP, PLA) for which we have an achievable MDES, given dilution and sample size. Impact estimates will be based on a sample of schools which have been balanced on observable characteristics (see 'Pre-processing to balance intervention and comparison groups' section for further details). Special schools will be included within the relevant school phase estimates, and where a special school is all through and includes Year 6 and Year 11 pupils it will be included in both samples.

In the case where there are insufficient schools not participating in the NTP to proceed we will conduct a purely descriptive analysis of the data (see Figure 1). This will involve tabulating the number and proportion of pupils in Year 6 and Year 11 taking part in the NTP and the characteristics of these pupils.

[8] If the number of potential comparison schools is too few then the alternative will be to undertake descriptive analysis without a counterfactual. This is unlilely to be necessary, given that it is now estimated that 24% of schools will not be participating in the NTP in 2022/23.

Table 2 Intervention and comparison schools (RQ5 - impact of the NTP delivered in 2022/23)

RQ	Impact for	Level at which intervention is defined	Intervention schools	Comparison schools
5.1	All pupils	School-level	Schools in which a minimum threshold proportion of Y6 or Y11 pupils were tutored in 2022/23	Schools in which no pupils were tutored in 2022/23
5.2	Pupils eligible for PP	School-level	Schools in which a minimum threshold proportion of Y6 or Y11 PP pupils were tutored in 2022/23	Schools in which no pupils were tutored in 2022/23
5.3	Pupils with lower prior attainment (PLA)	School-level	Schools in which a minimum threshold proportion of PLA pupils were tutored in 2022/23	Schools in which no pupils were tutored in 2022/23

For RQ6 (impact of the NTP delivered in 2021/22, matched school samples will be created in a similar manner.

Table 3 Intervention and comparison schools – school-level analysis (RQ6 - impact of the NTP delivered in 2021/22)

RQ	Impact for	Level at which intervention is defined	Intervention schools	Comparison schools
6.1	All pupils	School-level	Schools in which a minimum threshold proportion of Y6 or Y11 pupils were tutored in 2021/22	Schools in which no pupils were tutored in 2021/22
6.2	Pupils eligible for PP	School-level	Schools in which a minimum threshold proportion of Y6 or Y11 PP pupils were tutored in 2021/22	Schools in which no pupils were tutored in 2021/22
6.3	Pupils with lower prior attainment (PLA)	School-level	Schools in which a minimum threshold proportion of Y6 or Y11 PLA pupils were tutored in 2021/22	Schools in which no pupils were tutored in 2021/22

Pupil-level impact estimates: methodology

Pupil-level analysis offers an alternate approach, to estimate the impact of the NTP on the educational attainment outcomes of *tutored pupils* who are in Year 6 and Year 11 in the 2022/23 academic year.

Schools which take up tutoring (intervention schools) are a proportion of all schools in England. Within these some pupils are selected for tutoring. Selection into treatment therefore occurs at both the school and pupil levels, resulting in an evaluation design which may be characterised as an observational study with clustered data (Chang and Stuart, 2020). Such a design features a hierarchical data

structure (pupils clustered within schools) with the potential for selection bias at both levels. Previous studies (e.g. Weidmann and Miratrix, 2021) have demonstrated how it may be possible to address selection bias at the school level, for example using a matching and weighting approach, thus reducing overall bias. Pupil-level selection bias is more difficult to address. Although the intention of the programme is to target disadvantaged (e.g. PP and PLA) pupils, schools may choose which pupils receive tutoring support, and are likely to use a range of criteria which vary across schools, and many of which are unobserved in the data. This challenge was highlighted by the evaluation of the first year of the NTP (Lord et al., 2022), particularly as it proved impossible to build a predictive model of tutoring allocation using observed pupil characteristics. NFER's evaluation of Year 2 of the NTP (Lynch et al., 2022) found that schools were selecting pupils on range of criteria, including unobservable characteristics such as motivation to attend and engage with tutoring. Consequently it was not possible to use the predictive model to identify a comparison group of pupils to serve as a counterfactual.

Our starting point for the pupil-level (tutored pupils) analysis is therefore to define the intervention group as those pupils who were selected for tutoring in Years 2 and 3 of the NTP, and pupils eligible for the comparison group to be those selected for tutoring in Year 2 but not Year 3 (from schools not taking part in the NTP in Year 3)[9], and to compare these groups. By restricting our analysis to pupils who were tutored in Year 2, our aim is to create comparison and intervention groups that are similar with respect to those characteristics that determine selection for tutoring. This restricted group of pupils may have been tutored in any route and subject for NTP Year 2

We believe that the resultant impact estimates will be substantially less biased than if we had not restricted selection in this way. However, there is still the possibility of residual bias, especially due to factors that determine whether a pupil will receive a further year of tutoring after NTP Year 2 (e.g. pupils that do well in Year 2 considered not to need more tutoring). This was the motivation for restricting the comparison group to pupils at schools not taking part in Year 3: the decision to cease tutoring was made at a school level, rather than on a case-by-case basis, which should further reduce (though not entirely remove) the residual bias. However, this restrictive choice of comparison group does entail the risk of the sample size being too small to perform the analysis. If this is the case the comparison group will simply be all pupils tutored in NTP Year 2 and not tutored in NTP Year 3 (see Figure 1).

As an additional sensitivity check we will repeat the above pupil-level analysis, but this time the comparison group will be pupils tutored in Year 2 and not tutored in Year 3 *but who attended schools taking part in Year 3* (i.e. those pupils excluded from the above pupil-level analysis). That is, the comparison group are those pupils

[9] Pupils not being tutored in Year 3 who are attending a school participating in Year 3 will therefore not be included in this analysis.

not selected for Year 3 tutoring, despite it being available at their school. If the resulting estimates are close to those from the pupil-level analysis described in the previous paragraph then this suggests relatively little bias in that analysis. This is because the reason for a pupil not taking Year 3 tuition (school-level versus case-by-case basis) would not then appear to impact results. If the estimates diverge substantially, the degree of this divergence will provide an insight into how biased the main pupil-level analysis is.

Table 4 Intervention and comparison pupils – pupil-level analysis (RQ5 – impact of the NTP delivered in 2022/23)

RQ	Impact for	Level at which intervention is defined	Intervention pupils	Comparison pupils
5.4	All pupils	Pupil-level	All pupils who were tutored in 2022/23 and 2021/22	All pupils who were tutored in 2021/22 (but their school did not participate in 2022/23 NTP)
5.5	PP pupils	Pupil-level	PP pupils who were tutored in 2022/23 and 2021/22	All pupils who were tutored in 2021/22 (but their school did not participate in 2022/23 NTP)
5.6	PLA pupils	Pupil-level	PLA pupils who were tutored in 2022/23 and 2021/22	All pupils who were tutored in 2021/22 (but their school did not participate in 2022/23 NTP)

Analysis for the impact evaluation

We have noted a series to decisions which we will make based on the properties of the data and which will shape the ultimate analytical approach taken (these properties include the numbers of schools opting out of tutoring in 2022/23 and previous years, and the proportions of pupils receiving tutoring). To understand these properties the first stage of our analysis will be a **preliminary analysis,** and will include:

- Understanding the intervention and comparison group sizes for primary (Y6) and secondary (Y11) schools to determine whether it will be possible to form adequately sized pupil comparison groups.
- Investigation of proportions of pupils tutored (including in 2021/22 for pupil-level analysis) in order to estimate dilution, select a minimum dilution threshold and calculate the associated MDES.
- Using information in 2 above, update the power calculations ahead of any analysis. Combining the minimum detectable effect size (MDES) and dilution to understand the size of effect that NTP participation would need to produce at the pupil level will allow us to determine if this effect size is unrealistically large. These investigations will be undertaken separately for Year 6 and Year 11, estimating MDESs for schools with different levels of pupil participation.

Following the preliminary analysis we will proceed with our primary (school-level – eligible pupils) and secondary (pupil-level – tutored pupils) analyses identified in tables 2, 3 and 4 (contingent on the decision tree routes suggested by the preliminary analysis, see Figure 1).

Should the preliminary analysis prove that the impact analysis will be unfeasible, the analysis will not progress.

Pre-processing to balance intervention and comparison groups

Tutored pupils will be identified by NPD data (for those tutored in the 2022/23 academic year) and the DfE data archives (for those tutored in previous academic years). If however archived data does not clearly identify pupils who received tutoring during prior years, it may not be feasible to estimate impacts across all years for RQ6.1 – RQ6.3, or for pupil-level analysis (RQ5.4 – RQ5.6).

Before proceeding to estimate treatment effects we will carry out pre-processing (separately for each sample identified by tables 2, 3 and 4) using entropy balancing. Entropy balancing is a method that assigns weights to comparison units to balance observed variables between the intervention and comparison groups; these weights are then included in subsequent regression modelling. Unlike many other data pre-processing methods, variables are balanced directly, rather than by using a propensity score. However, this approach (and other approaches to creating equivalent groups using observed characteristics, e.g. propensity score matching) does not overcome the possibility that differences in unobserved characteristics may be associated with outcomes, and that they may differ between intervention and comparison groups. Whilst we have no reason to believe that this will cause substantial bias in the school-level analysis, we are aware of the previously described problem of selection bias for pupil-level analyses. By restricting eligible pupils to those tutored in previous years we expect to largely mitigate this.

Statistical models

Each statistical model will be a linear mixed effects model, with scaled score or point score as the outcome, intervention group and any other appropriate covariates as fixed effects and school as the random effect. Model weights will be taken from the entropy balancing procedure and applied at a school- or pupil-level as appropriate to the analysis. Probable covariates for inclusion will be the variables used in the balancing, including baseline scores (table 1). The intervention group coefficient will be tested for significant difference from 0 at a 5% testing level. For RQ5.1 – RQ5.6 and RQ5.8, seven models will be applied for English and Maths outcomes in both Y6 and Y11. For RQ5.7, analyses used for RQ5.1 – RQ5.6 will be repeated, to explore heterogeneity in impacts associated with pupil characteristics (gender, ethnicity, first language, SEND status) in addition to school characteristics (Income Deprivation Affecting Children Index – IDACI, and location by region). In each case the impact of the intervention will be estimated for the appropriate subgroup of pupils (e.g. male pupils only) or schools. For RQ5.8 the analysis will be conducted on only those pupils taking part in both NTP Year 2 and Year 3 and the intervention indicator will be replaced by number of tuition hours, categorised into discrete bands.

Impact estimates for RQ6 will be made in a similar manner to those of RQ5, again using linear mixed effects models to account for the hierarchical nature of the data. The dummy variable indicating route of tutoring in 2022/23 will be replaced by an indicator for 2021/22 in these models).

Implementation and Process Evaluation (IPE)[10]

The IPE will complement the impact evaluation, by helping to understand how the implementation of the new NTP model in year 3 might affect the intended outcomes for pupils. The IPE will explore research questions 1-4 listed above. We will use a mixed methodology for the IPE. Two online school surveys will offer breadth of data collection, covering a wide range of schools which are participating in the NTP in 2022-23. Interviews with the delivery providers, school staff and tutors will offer a more in-depth exploration of the research questions.

Surveys

We are carrying out two online surveys with school staff.

Survey 1 (November 2022-January 2023) will capture school senior leaders' experiences of setting up tutoring in the 2022-23 academic year, including any engagement with NTP delivery partners and tuition partners, and initial impressions of tutoring delivery and impact.

Survey 2 (March 2023) will capture the views of senior leaders, classroom teachers, and special educational needs and/or disabilities coordinators (SENDCOs). Senior leaders will be asked follow-up questions on the implementation and impact of the NTP. Including classroom teachers in survey 2 will enable us to collect their perspectives on how tuition is embedded in school and the benefits of tutoring. SENDCOs will be asked to provide their specialist views on the benefits of tutoring, adaptations for SEND tutoring, and how tutoring integrates with broader SEND support.

Survey sample

School Census data on NTP school participation in 2022/23 will be used to send the surveys to participating schools.

Survey design and administration

The surveys will consist of mainly closed questions. Two open questions exploring what is working well with the NTP in 2022-23 and what could be improved will be included in the first survey. The surveys are estimated to take a maximum of 20-25 minutes for senior leaders and 10-15 minutes for teachers and SENDCOs.

[10] Prior to publishing this study plan, the IPE section was agreed with DfE and the IPE conducted as per the plan (any amendments such, as an addition of incentives for interviewees, are reported in the IPE report being published in October 2023). At the time of publishing the study plan, the IPE has now been completed

Once ‘live’, the surveys will be accessible for approximately four-six weeks. During the survey period, we will send two reminders to non-responding schools. Each school will receive their own unique link to enable us to monitor which schools have responded and remind them appropriately. We will also create an open link which can be shared through different networks reaching a wider audience.

To obtain views from classroom teachers and SENDCOs involved in the NTP, we will ask the headteacher/senior leader to share survey 2 with relevant staff. To boost engagement in Survey 2 from specialist settings (as we are including questions on how the NTP reaches pupils with SEND), we will develop targeted recruitment materials which emphasise the importance of specialist settings for this research. We will also ensure that the surveys are inclusive for the context of specialist settings. We will also ask SEND networks to share the survey links, for example through social media or newsletters.

We are offering all individual respondents the opportunity to be entered to win a prize to win one of five £200 Amazon vouchers or National Book tokens for their school, to thank them for their participation. There will be a prize draw for both surveys.

Survey analysis

We will produce descriptive statistics for each question and cross-tabulations for key questions by, for example, respondent type (e.g. senior leader, SENDCO, class teacher), school phase (primary/secondary), school type (mainstream or specialist setting), provision of tutoring by internal/external tutors, and/or NTP route. The responses to the open questions in survey 1 will be coded and analysed for the survey 1 output, then used to develop closed questions for survey 2. Significance testing will be applied between the categories of the characteristics described above on a subset of questions. We will determine a selection of hypotheses to test for significance, while maintaining the overall false positive rate to be 5%. The type of test will be appropriate to the class of data for each question, but expected methods include z tests for proportions, χ^2 for categorical data and t-tests for continuous outcomes. For a two-category characteristic with a continuous outcome, the MDES with 1000 respondents is 0.18 and with 1300 respondents is 0.16. If other respondent characteristics are not balanced between the groups, weighting would be applied to endeavour to ensure unbiased conclusions.

Qualitative interviews

Qualitative research will yield perspectives from: the NTP delivery partners (the DfE customer support service and the three external contractors responsible for tutoring provision, training and quality assurance); TPs; staff in schools; and tutors.

Design and delivery of qualitative interviews

Interviews with NTP delivery partners and tuition partners

In March 2023, we will carry out individual or small group video or telephone interviews with key personnel at each of the main delivery partners (the DfE customer support team and three external contractors). These interviews will focus on relevant aspects of the NTP model in year 3, including what support schools have sought, what is working well and what could be developed.

We will also carry out individual or small group interviews with key personnel in 10 TPs. We propose separate interviews with each organisation, to capture their specific experiences and involvement with the NTP. TP interviews will also explore their experiences of the new implementation model, how tuition is being embedded in the schools they work with, how they are supporting pupils (including those with SEND), and their perceptions of tutoring benefits.

Interviews will last up to 60 minutes.

Interviews with school staff and tutors

In March-May 2023 we will carry out up to 60 individual in-depth interviews (by video or telephone) across school staff (senior leaders, classroom teachers, and SENDCOs) and NTP tutors. It is likely that the balance will be towards interviewing more senior leaders than those in other roles. Interviews will last between 30-60 minutes (e.g., interviews with senior leaders are likely to cover more topics and could take 60 minutes, while interviews with others could be shorter).

Senior leaders who respond to survey 1 will be asked if they are willing to be contacted for interview. If yes, they will be sent an invitation and will also be asked to pass on the invitation to other key members of staff we would like to talk to (SENDCOs and teachers).

We will aim to include a range of school settings, including different phases (primary/secondary), school types (mainstream/special schools), regions, and participation in the different NTP routes.

Interviews with senior leaders will explore:

- how and why the school has made decisions about tutoring, including NTP routes, student and subject selection, and delivery
- how these decisions are enabled or constrained by school context and NTP support services in place for year 3
- continuity and changes in tutoring compared with previous years

- how tutoring is being embedded in the school and integrated with other support, and the additionality of tutoring provision due to NTP funding
- long-term intentions for tutoring, considering the impact of subsidy changes
- the perceived benefit of tutoring (e.g., its impact on the school and on outcomes for pupils), in the context of the school's aims.

SENDCO interviews will be crucial for understanding how the NTP is supporting pupils with SEND. These interviews will also explore perceptions of how tuition is being embedded within the school and specifically within SEND support, as well as the perceived benefits of NTP for SEND pupils.

Interviews with class teachers will be conducted with teachers whose pupils are receiving tuition in their subject, to understand how tutoring is embedded in schools, the interaction between tuition and teaching, and the perceived benefits of tutoring from a class teacher's perspective.

Tutors will be asked for their views on how the NTP model works in practice, the training they have received, and on the benefits of the programme.

Analysis of interviews

Interviews will be recorded (following agreement), summarised and imported into the MAXQDA qualitative analysis software for thematic analysis across interviewee and school types. We will use thematic analysis across interviews with delivery partners, tuition partners, school staff and tutors to draw out common views and identify differences across contexts. Where we undertake multiple interviews within a school setting, qualitative case studies will be constructed and presented in the report to provide illustrative examples of tutoring practice. Case studies will be anonymised.

Outputs and Dissemination

We will provide the following outputs:

- **IPE survey 1**: frequency tables and crosstabulations (by school phase) in excel; and a short headline report (10 pages)
- **IPE survey 2**: frequency tables and crosstabulations (by school phase and staff role) in excel; and a short headline report (10 pages)
- **Overall IPE report and presentation**: a presentation of the draft report to DfE followed by a report for publication (including findings from both surveys and qualitative interviews)
- **Interim impact report:** a short report (5 pages) and presentation based on the KS2 analysis
- **Final impact report and presentation**: a presentation of the draft report to DfE followed by a report for publication (including findings from the impact evaluation).
- On completion of the evaluation, in partnership with the Department, we will share the evaluation findings with key stakeholders to enable their policy/practice decision-making on learning recovery.

Ethics

All of NFER's projects abide by our Code of Practice, which is in line with the Codes of Practice from BERA (the British Educational Research Association), MRA (the Market Research Association) and SRA (the Social Research Association), among others.

Data protection

Data protection statement and GDPR compliance

The evaluation complies with the data protection principles set out in Data Protection Act 2018 (DPA) and the UK General Data Protection Regulation (UK GDPR). NFER holds ISO27001 and Cyber Essentials Plus certifications and is registered with the Information Commissioner's Office.

To carry out the evaluation, it will be necessary to use and share personal data about pupils, NTP delivery partners, and key staff members at participating schools.

NFER will use appropriate measures to prevent pupils' personal data from being accidentally lost, used or accessed in an unauthorised way, altered or disclosed. In addition, they will limit access to pupils' personal data to their staff members who have a business need to see it. Any data shared between NFER and DfE will be via the Office for National Statistics' Secure Research Service (see below) or secure portal.

Legal bases

DfE is the data controller and have commissioned NFER to process the data for the evaluation as it is necessary for the performance of a task carried out in public interest vested in the DfE as controller (article 6 1 e).

The statutory basis for these tasks are set out in:

- S.10 The Education Act 1996: The Secretary of State shall promote the education of the people of England and Wales.

A separate legal basis is identified for processing special data. The legal basis for processing special data is covered by:

- GDPR Article 9 (1) (g) which states that processing is necessary for reasons of substantial public interest, on the basis of Union or Member State law which shall be proportionate to the aim pursued, respect the essence of the right to data protection and provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject.

Use of Secure Research Service (SRS)

NFER will access the NPD data for analysis through the SRS secure online system. The SRS system does not allow users to remove or copy data from its servers.

The project meets the Office for National Statistics “five safes” in the following ways:

- Safe people: all researchers accessing the project’s data via the SRS are Accredited Researchers and hold a ‘basic disclosure’ certificate that is no more than 2 years old
- Safe projects: the project meets the conditions for accessing personal level data. A full request to the NPD team will be submitted, outlining the appropriate and ethical use of the data, and the public benefit of the research (to contribute to the evidence base on tutoring, and inform future tutoring programmes). It has broader societal benefits and will contribute to improving the lives of learners by providing evidence about the most effective ways of providing catch-up tuition. The evaluation cannot be done without processing personal data but processing does not override the data subject’s interests.
- The research team and the DfE are committed to publishing the results of the study.
- Safe settings: all researchers working on the NPD data will only access the data via the SRS secure online system.
- Safe outputs: All outputs will be checked by the ONS team to ensure that the outputs do not allow identification of individuals. Outputs will be checked against the Intended Permitted Outputs and be subject to standard ONS disclosure rules.
- Safe data: the data request includes data variables of identifiability risk level 3 (PMR), as the DfE will match the data we collect with the NPD data. The PMR (meaningless identifier) replaces the UPN when the data are matched and then archived to minimise the risks of identification. Our researchers will only analyse de-identified data in the SRS.

All privacy notices for the evaluation contain information about personal data collection and linking to NPD. They can be found on the evaluation website

Analysis of archived data

In order to carry out analysis of the longer-term impact of the NTP, we will apply to the EEF to access and analyse archived Year 1 evaluation data, for which the EEF is data controller. NFER will apply to access the data in pseudonymised form and process it via the NPD and SRS. Similarly, we will apply to DfE to access and analyse archived Year 2 evaluation data.

Rights

Individuals have the right for their data not to be included in the evaluation by contacting NTP@nfer.ac.uk and the evaluators will ensure they do not receive their data from the NPD for analysis.

Under data protection legislation, individuals have the right:

- to request access to information that we hold about them (subject access request)
- to have their personal data rectified, if it is inaccurate or incomplete
- to request the deletion or removal of personal data where there is no compelling reason for its continued processing
- to restrict our processing of pupil's personal data (for example, permitting its storage but no further processing)
- to object to our processing
- not to be subject to decisions based purely on automated processing where it produces a legal or similarly significant effect on the pupil

The NFER is responsible for the day-to-day management of this evaluation. DfE determines the purposes and means of processing personal data as part of this project. An individual should contact the DfE if they wish to make a subject access request, restrict or object to processing. Please see the DfE's Personal Information Charter for further information and contact details for their Data Protection Officer. NFER will notify the DfE immediately if in relation to processing personal data under or in connection with the Contract NFER receives any such requests e.g. a Data Subject Access Request.

Retention periods

NFER will retain personal data until the completion of the evaluation (May 2024). Personal data such as contact details will only be kept as long as they are required for the specific purpose for which they were collected. Survey data and interview recording will be deleted as soon as a39nonymized or pseudo-anonymised datasets or written transcripts have been produced. All other data will be stored for six months following the publication of the final research report, then securely deleted.

Data protection roles

The DfE is the data controller for any personal information used for this evaluation. It has determined the means and purpose of the processing of personal data in the

evaluation. The NFER is a data processor; it only follows the instructions of DfE when processing personal data.

Personnel

Member of the team	Role
Stephen Welbourne	Impact Project Director – Stephen will be responsible for intellectual leadership and quality assurance of the impact evaluation.
Pippa Lord, Trials Director	IPE Project Director – Pippa will be responsible for intellectual leadership and quality assurance of the IPE. Pippa was consortium lead for the evaluation of NTP year 1.
Sarah Lynch, Senior Research Manager	Project Leader and IPE lead – Sarah will be the day-to-day contact for the Department. She will have an overall project management role and will lead the IPE element of the evaluation. Sarah is currently the project leader for the evaluation of the NTP in year 2 for the DfE. Sarah will be supported by other experienced researchers assigned to the team.
Ruth Staunton, Senior Statistician	Lead statistician – Ruth will oversee the IPE survey analysis and impact analysis, supported by other statisticians assigned to the team. Ruth is the lead statistician for the NTP evaluation in year 2.
Kathryn Hurd, Evaluation and Survey Lead, Research and Product Operations	Operations oversight – Kathryn will guide and support on operationalising the IPE surveys. She was the operations and data lead for the year 1 and year 2 NTP evaluations.
Jishi Jose, Project Manager	Research and Product Operations team; responsible for the operational elements of the IPE surveys
Katherine Aston, Social Research Manager	IPE team
Chris Morton	Project statistician
Gemma Schwendel	Project statistician

Risks

Risk	Assessment	Controls, countermeasures and contingencies
Low response rates from IPE surveys	Likelihood: medium Impact: high	Consideration of length to minimise burden. Invite all eligible schools to respond. Clear and concise communications with schools, focussing on the value of the research. Targeted communications to special schools to maximise response amongst that group. Consideration of best timing. Use of project email address and named project contact to answer queries. Targeted reminders. Have included a prize draw to thank respondents for participating.
Low engagement in IPE interviews	Likelihood: medium Impact: high	Invite all senior leaders who respond to the first survey (then select types of schools, range of NTP routes etc.). Present as an opportunity for individuals to share their experiences, which will inform the future development of tutoring in schools. Be flexible in terms of timing. If necessary, could discuss offering an incentive (not included in the costs).
Difficulty constructing matched comparison groups as too few schools opting out of NPT to form adequately-sized pupil comparison groups	Likelihood: medium Impact: high	Enact break clause so that impact evaluation proceeds without counterfactual (e.g. descriptive and comparative impact estimates.)
Preliminary analysis finds that the proportion of pupils in receipt of NTP tuition is low and so the	Likelihood: high Impact: high	Analyse outcomes for a subsample of schools with a larger proportion (>X%) pupil participation (assuming a sufficient number of comparison schools to form a balanced sample). And/or Investigate the proportions of pupils by group (all, PP, PLA) in receipt of NTP tuition. If this proportion is acceptable and dilution is less

dilution of the tutoring effect would be unreasonably large		extreme, proceed with the ITT analysis using possible alternative populations of pupils. If both options are not feasible do not proceed with ITT (school-level) estimates; investigate possibility of pupil-level analysis.
Number of pupils selected for NTP in Years 2 and 3 (intervention) and number of pupils selected in Year 2 but not Year 3 (comparison) is too low.	Likelihood: medium Impact: high	Increase comparison group sample size by including all pupils tutored in NTP Year 2 but not NTP Year 3 (see Figure 1). If the above approach still leads to an unacceptably small sample: Do not perform pupil-level analysis.
Archival data sets do not identify 2022/23 Y6 and Y11 pupils who received tutoring in prior years of the NTP	Likelihood: low Impact: medium	If data quality is not acceptable, do not proceed with long-term (RQ6) analysis and continue only with analysis to answer research questions pertaining to impact of delivery in 2022/23.
Resurgence of Covid-19 causing school closures and test cancellations	Likelihood: medium Impact: high	If tuition is delivered online at home evaluation can continue. Online delivery may moderate programme impact, with extent of online delivery unknown at the pupil level. Impact estimates may therefore require caveats regarding mode of delivery.
Changes to key project personnel put delivery quality or timescales at risk	Likelihood: low Impact: medium	Fully resourced project management function within the team, led by Project Leader. Large pool of highly- experienced staff and research associates, who could fill gaps and provide cover for absence. Project documentation centrally stored and kept up-to-date to ensure effective handover.
Slippage in project timetable	Likelihood: medium Impact: high	Realistic project plan, but could slip if, for example, data are not made available in NPD according to schedule in NPD data tables. Project

		management systems in place to track progress. Regular progress meetings with DfE and internally. Agree any revisions to timetable. Apply more resources if required.

Timeline

Date	Activity
October 2022	Project inception and start-up Design and set up of IPE survey 1
November	IPE survey 1 recruitment, administration, and dispatch Early data archive access planning for impact evaluation
December	IPE survey 1 in field IPE design, administration and set-up of survey 2 Early data archive access planning for impact evaluation
January 2023	IPE survey 1 deadline IPE survey 1 data cleaning, coding and analysis IPE interview schedule drafting
February	IPE survey 1 analysis IPE interview drafting IPE sampling and recruitment for interviews/send invitations IPE survey 2 design and set-up Impact evaluation data specifications
March	Output: IPE survey 1 output: tables and headline report IPE survey 2 dispatch / completion Commence IPE interviews
April	IPE survey 2 cleaning IPE survey 2 analysis IPE interviews continue
May	Output: IPE survey 2 outputs: tables and headline report Complete IPE interviews IPE interview analysis
June	Complete IPE interview analysis Commence IPE report writing
July	Data applications for impact evaluation (NPD and data archives) Output: Submit Study Plan Output: Draft IPE report and presentation
August	Output: Final IPE report
September	Preparation of impact data application
October	Data application/DSAP
November	Data preparation for impact evaluation (Y6 pupils) Balancing for impact analyses (ITT and treated pupils – Y6 pupils)

December	Commence impact analysis (ITT and treated pupils – Year 6 pupils) Submit data application for Key Stage 4 data
January 2024	Continue impact analysis (ITT and treated pupils – Year 6 pupils) Data preparation for impact evaluation (Y11 pupils)
February	Output: Interim impact evaluation report (Year 6 pupils) Balancing for impact analyses (ITT and treated pupils – Y11 pupils) Commence impact analysis (ITT and treated pupils – Year 11 pupils)
March	Complete impact analysis (ITT and treated pupils – Year 11 pupils)
April	Drafting of final report (Year 6 and Year 11 overall)
May	Output: Draft final impact evaluation report and presentation
June	Output: Final impact evaluation report Production of databases

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Appendix A: Code of practice and ethics approval checklist

Section of Code of Practice	Consideration of Code of Practice (CoP)	Yes	No	N/A
Ethics	Level of consent required – does the project allow for the level of consent required?	X	-	-
Ethics	Will research participants be provided with all the required information to enable them to make an informed choice?	X	-	-
Ethics	Have you looked at and do you intend to follow the guidance on selecting children/young people for interview?	-	-	X
Ethics	Will you follow the protection and safety guidelines?	X	-	-
Ethics	If the project involves children/young people have all those involved undergone disclosures/child protection training?	-	-	X
Data protection	Will the project follow the 8 principles of the data protection act?	X	-	-
Data protection	Will the project follow the rules for the processing of sensitive personal data?	X	-	-
Data protection	Will the project allow for safe transfer of data into and out of our systems?	X	-	-
Data protection	Will the project include a secure coding system for recording participants' names?	X	-	-
Data protection	Have data transfer issues / protocols been discussed / confirmed with the client?	X	-	-
Caring for research participants	Will the project take into account designing research questions that make sense to children/young people?	-	-	X
Caring for research participants	Will the project follow the guiding principles for the development of assessment instruments, methods and systems? (Will only use standardised tests which we believe satisfy requirements)	-	-	X

Section of Code of Practice	Consideration of Code of Practice (CoP)	Yes	No	N/A
Caring for research participants	Will the project involve taking, producing and using visual images? (Please refer to points to consider when taking photographs or video images, storing images, producing illustrations and using visual images)	-	-	X

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