Evaluation of the East Lothian Tutoring Initiative (ELTI)

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"*This is a final summarised version of the evaluation report in line with the funder's requirement*"

EXECUTIVE SUMMARY

The East Lothian Tutoring Initiative (ELTI) was developed in rapid response to growing concerns about the widening achievement gap amongst pupils from disadvantaged backgrounds, who had been disproportionately disadvantaged as a result of COVID-related school lockdowns and associated interruptions to their learning. The initiative was informed by evidence that tutoring can substantially improve learning outcomes for children from disadvantaged backgrounds and can help to close "the poverty-related attainment gap".

Six secondary schools across East Lothian participated in ELTI, involving 333 pupils being tutored across eighteen subjects. Tutors were drawn from two different routes: one route employed and trained local tutors through Queen Margaret University, and the other route bought in tutors from My Tutor, an established private tutoring company. Tutoring was offered to pupils from fourth to sixth year and took place between January and May 2021. The initiative was funded by the STV Children's Appeal and an anonymous local charity.

The University of Strathclyde was commissioned to undertake a process and outcome evaluation, although it is important to note that owing to the need for very rapid establishment of the tutoring programme, the evaluation process was designed after the start of the tutoring programme. The evaluation was designed to:

1. Review contemporary evidence on international tutoring initiatives;
2. Document the developmental and implementation process of the ELTI; and
3. Measure the impact of the tutoring programme on pupils' achievement and aspirations, and the extent to which this closes possible gaps in achievement.

The review of relevant literature highlights the benefits of some, but not all, tutoring on pupils' self-esteem, confidence, aspirations, and achievement. Positive outcomes are due to factors such as group size, timing, duration and frequency of sessions, and the type or qualifications of tutor involved. The literature review also points to increased gains for pupils from disadvantaged backgrounds compared with more advantaged peers.

The evaluation adopted a mixed methods approach. Data used to inform the evaluation included interviews with key stakeholders (including pupils), project documents, administrative data from participating schools and a pupil survey. It was not possible to

evaluate impact on educational achievement due to the absence of comparable pre-intervention data for participating pupils, and pupils not involved in the tutoring.

The evaluation reveals that:

- Pupils from the targeted demographic groups (e.g., registered for free school meals; living in a disadvantaged area) were more likely to participate in tutoring, but so too did some pupils unregistered for free school meals or from affluent areas.
- There were significant socioeconomic inequalities in the delivery of the ELTI and in pupil attendance. Pupils from disadvantaged backgrounds were less likely to be offered a higher number of tutoring sessions, were less likely to take more than one tutoring subject and were less likely to attend tutoring sessions than peers from advantaged backgrounds.
- According to 55% of the survey respondents, online tuition improved their *ability* and *exam readiness* a lot or by a very large amount, while 40% reported that their *confidence in the subject* improved a lot or by a very large amount because of the tutoring.
- Less than 15% of respondents indicated that the tutoring programme influenced their aspirations to stay in school, to enter higher education or to seek employment.
- About 80% of pupils reported that they found the tuition useful or extremely useful, and about 60% said they were likely or extremely likely to accept tutoring if it was offered again.
- Pupils indicated that they benefited positively from the tuition in terms of increased ability, confidence and their preparedness for exams.

Eight recommendations for future tutoring initiatives arise from the present evaluation.

1. The ability of programmes to attract and retain intended beneficiaries should be a key design feature of future programmes. Parental engagement is key to achieving this goal.
2. To be successful, initiatives to support pupils experiencing disadvantage should also include approaches that address barriers to participation from disadvantaged groups.
3. As a minimum, equity in the number of sessions available to all pupils should be ensured. This will be a crucial marker for evaluating success.
4. Clear communication with pupils is required about the purpose and goals of the tutoring activity.

5. Communication should be established between schools and tutors, involving pupils to ensure complementarity of support.

6. From their outset, future programmes should establish a consistent platform of data collection and robust evaluation designs. Addressing the challenges of pre- and post-intervention achievement data should be prioritised to enable a robust evaluation of the impact on pupil achievement.

7. Appointment of a designated coordinator is important to facilitate communication between partners, provide a central point of contact, and ensure consistency of approach across school.

ACKNOWLEDGEMENT

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1. INTRODUCTION

Evidence on COVID-19 related school closures indicates socioeconomic differences in children's engagement with home and online learning (Allen & Wespieser, 2021; Kuhfeld et al., 2020; The DELVE Initiative, 2020). For example, in Scotland, there were significant differences by socioeconomic status (SES) in school attendance after schools reopened, with children from lower-SES being more likely to miss school (Sosu & Klein, 2021). As a result, the pandemic is expected to widen socioeconomic gaps in pupils' educational achievement worldwide (Education Endowment Foundation, 2020a; Kuhfeld et al., 2020), with emerging evidence supporting these expectations (Engzell et al., 2021).

The East Lothian Tutoring Initiative (ELTI) was developed to address the exacerbation of socioeconomic status achievement gaps and provide senior secondary school pupils from disadvantaged backgrounds with tutoring opportunities. It was funded by support from STV Children's Appeal and a local charitable trust that wished to remain anonymous. The ELTI was informed by evidence that tutoring substantially improves learning outcomes for children from disadvantaged backgrounds and helps close the achievement gap related to poverty (e.g., Dietrichson et al., 2017).

ELTI was developed as a rapid response intervention to address an immediate need and learn lessons from such an approach. Six secondary schools in East Lothian Local Authority participated in the tutoring intervention. Two main tutoring approaches (Local Tutor and My Tutor) were used. Queen Margaret University developed the Local Tutor approach and recruited and trained tutors based in the local authority area. My Tutor, a private tutoring company, was recruited because of their experience in tutoring and involvement in delivering the national tutoring programme in England.

The University of Strathclyde was contracted to undertake a process and outcome evaluation of the ELTI. The goal was to learn about the process of establishing a quick response intervention to address an emerging crisis such as school closures due to COVID-19. The specific *aims and objectives of the evaluation* were:

1. Briefly review contemporary evidence on tutoring initiatives internationally;

2. Document the developmental and implementation process of the ELTI; and

3. Measure the impact of the tutoring programme on pupils' achievement and aspirations, and the extent to which this closes possible gaps in achievement.

This report provides findings from the process and outcome evaluation of the ELTI from January to May 2021. First, we briefly review contemporary international evidence on tutoring interventions in general and tutoring interventions in response to the COVID-19 pandemic. Second, we describe the ELTI tutoring programme, delivery approach and process and how pupils were selected. Third, we briefly describe our evaluation approach. The fourth section presents findings from the evaluation. This includes characteristics of pupils enrolled on the tutoring programme, number of subjects taken by participants, number of tutoring sessions offered, level of pupil attendance, pupils' perceptions of the impact of the tutoring programme, its impact on their learning and aspirations, and the extent to which these vary by pupil characteristics. Finally, we discuss key lessons from the evaluation and present recommendations.

2. REVIEW OF RESEARCH EVIDENCE ON TUTORING PROGRAMMES

Evidence suggests that tuition improves pupils' achievement in contexts such as the USA (Fuchs et al., 2013), England (Torgerson et al., 2013, 2018), Switzerland (Hof, 2014), Sri Lanka (Damayanthi, 2018), and China (Clark et al., 2021). Reviews such as Nickow et al.'s (2020) meta-analysis of 96 studies concluded that tutoring programmes positively affect children's maths and literacy achievement (pooled medium effect size of .37). However, not all studies found a positive effect of tutoring on learning outcomes. For instance, Stubbs (2019) showed that tuition significantly increased achievement in mathematics but had little effect on English performance. In addition, Australia's Quick Smart Numeracy programme found only a marginal increase in numeracy outcomes after a 30-week intervention (Evidence For Learning, 2019).

Several tutoring programmes were developed around the world as a means of addressing COVID-19 related learning loss (e.g., Sonnemann & Goss, 2020; Lord et al., 2020; Carlana & La Ferrara, 2020). For instance, Carlana and La Ferrara (2020) conducted a randomised control trial to assess online tuition's effects on middle school pupils' academic performance during school closures. There were 530 pupils in the tuition group and 529 pupils in the control group. The tuition was delivered by university students who volunteered to help. Tuition was delivered over 34 days, and on average, pupils received 17 hours of tuition over 14 sessions. Compared to their peers who did not receive tutoring, there were significant improvements in test scores (consisting of multiple-choice tests in English, Maths and Italian) of pupils who received tuition during the school lockdown.

Aside from the effects on achievement and learning, pupils receiving tuition also report that tutoring improves their self-esteem (Hajar, 2018; Stubbs, 2019), confidence (Torgerson et al., 2018; Stubbs, 2019), and interest in learning (Hajar, 2018). Carlana and La Ferrara (2020) also found improvements in pupils' socioemotional skills, aspirations and psychological wellbeing. The Tutor Trust in the UK provided tuition for 6303 pupils during the 2020/2021 academic session, 61% of whom were from disadvantaged backgrounds. Although assessing the impact of tuition on achievement was not possible, they reported that 91% of pupils felt more prepared and confident in maths and reading (The Tutor Trust, 2019).

2.1. Effect of tuition on pupils from disadvantaged backgrounds

The literature indicates that tuition can be particularly beneficial for pupils from socioeconomically disadvantaged backgrounds (e.g., Carlana & La Ferrara, 2020; EEF, 2014b, 2018; Dietrichson et al., 2017). For instance, an EEF (2014b) evaluation on the impact of tutoring found a 3-month learning gain on average for all pupils but four months for pupils eligible for free school meals. Another EEF study (2018) reported an average learning increase of two months among all pupils but five months among children eligible for free school meals. In addition, evidence from a meta-analysis of different interventions found that tuition helps to close the gap in learning outcomes between pupils from low and high socioeconomic households (Dietrichson et al., 2017). Overall, parents from advantaged socioeconomic backgrounds are those most likely to invest in private tuition for their children (Liu, 2012; Pearce et al.,2018).

2.2. Key elements of tutoring

Studies have found several key factors underpinning positive tutoring effects: tuition group size, timing and duration, mode of delivery and tutors' professional qualification.

Tuition group size
Evidence suggests that smaller tuition groups have a greater impact on children's learning achievement (Slavin et al., 2011; Schwartz et al., 2012; Higgins et al., 2016; Fryer & Howard-Noveck, 2020). Overall, one-to-one tuition leads to greater improvement in outcomes. However, small groups of fewer than six pupils per tutor can have a similar impact on outcomes, although this can vary by subject (e.g., reading results are similar for one-to-one and small groups, but maths is better one-to-one (EEF, 2020b)). Although typically slightly less effective, small group tuition comprising three and five pupils is also beneficial for children's learning (Higgins et al., 2016).

Timing, duration, and frequency of tuition
The timing at which tuition is delivered is essential to the efficacy of the tuition. There is evidence of a greater impact of tutoring during the school day than after school (Nickow et al. 2020). Additionally, frequent, and short tuition sessions have beneficial effects on educational outcomes (EEF, 2015). Short sessions of thirty minutes 3 to 5 times per week result in optimum

impact (EEF, 2016; 2018). Longer one-hour sessions were also beneficial (EEF, 2015; Torgerson et al., 2018). However, the level of progress is similar to shorter programs (e.g., EEF 2014a; 2018), suggesting that there is not much additional benefit from longer sessions. Overall, short but frequent sessions are less burdensome for pupils.

Tuition delivered online

Tutoring programs are typically delivered face-to-face. However, the COVID-19 school lockdowns meant that this was not possible. The only alternative was to provide online tuition. Evidence looking at the efficacy of online tuition is limited (e.g., Burch et al., 2016; Roschelle et al., 2020), but the teaching and learning toolkit (EEF, 2020b) indicates that, on average, tuition delivered online has a positive impact.

Type of tutor

The type of tutor that delivers the tuition has a role to play in the efficacy of a tutoring programme. Positive effects are stronger when tutoring is delivered by teachers and paraprofessionals rather than non-professionals or parents (Nickow et al., 2020). For example, peer tutoring can be effective but is not as beneficial as tutoring by teachers or paraprofessionals (Nickow et al., 2020). Programmes involving teaching assistants tend to be the most common and can have a beneficial impact (EEF, 2015; 2016; 2018), but tend to be less effective than those using experienced and specifically trained teachers, which have nearly twice the effect on average (Nickow, 2020). Where tuition is delivered by teaching assistants, training and structured programmes are advisable for the best results (EEF, 2018).

3. EVALUATION METHODOLOGY

To achieve the aims and objectives of the evaluation, we used a mixed-methods approach, including surveys, interviews, documentary reviews, and analyses of administrative school data. Given the context of the study, the proposed method was developed collaboratively with programme coordinators. Precisely, our methodology consists of:

a. Process evaluation: Data for the process evaluation came from several sources. First, we documented the process through several discussion meetings (*n=15*) with ELTI project coordinators and My Tutor programme managers, link teachers, and the Quality Improvement Officer from the local authority. Second, we reviewed key documents detailing the original proposal for the ELTI programme as well as an interim report written by the project coordinator for funders (*n=2*). Third, we undertook interviews with pupils who took part in the tutoring programme (*n=3*). Fourth, we used administrative data from participating schools (*n=2748*) and the tutor groups (*n=333*). Fifth, we undertook a structured interview with the ELTI project coordinators (*n=2*) following our interim report to the funders in October 2021. These datasets enabled us to document the development and implementation of the ELTI (aim 2).

b. Impact Evaluation: To evaluate the impact of ELTI, we obtained data from pupils using a closed and open-ended survey (*n=79*) and a qualitative interview with pupils who took part in the tutoring programme (*n=3*). The aim was to examine the pupils' perceptions of the impact of the ELTI on learning and aspirations (aims 2 and 3). The original intention to use pre- and post-intervention school administrative achievement data was not feasible due to an absence of comparable pre-intervention achievement data for pupils who took part in the tutoring and those not enrolled on the tutoring programme.

Data Analysis

We analysed the survey and administrative data using descriptive and inferential statistics (e.g., regression, ANOVA and Mann Whitney U test). The three interviews were analysed thematically using an inductive approach; that is, we derived themes from the data rather than imposing them. These themes were generated by two research team members analysing interviews independently and then coming together to agree on the final coding framework. To

allow anonymous reporting, the three interviewees were given pseudonyms – Callum, Erin and Stuart.

Ethics

Ethical approval for the study was granted by the University of Strathclyde, School of Education Ethics Committee.

4. FINDINGS: DEVELOPMENT OF ELTI

4.1. Aims

Documentary evidence from the programme proposal shows that the East Lothian Tutoring Initiative (ELTI) was developed "*in response to the educational challenges faced by young people due to COVID-19,... to provide additional tutoring for disadvantaged young people in 4th-6th year who are due to complete national assessments in the spring of 2021.*" It was to primarily focus on the immediate needs of disadvantaged young people in East Lothian. Structured interview responses by the project coordinator confirmed this goal, stating that the development of the ELTI was motivated by the need to:

> "*ensure that young people in S4-S6 from disadvantaged backgrounds were able to get additional support to enable them to achieve the best that they could do in their SQA qualifications, despite the loss of learning and negative impact of the COVID-19 pandemic. It was very much seen as an emergency intervention during the pandemic, providing some mitigation to the likelihood of existing educational inequalities being exacerbated.*" (ELTI Project Coordinator)

They further elaborated that the intervention aimed to "*ensure that as many young people as possible can access tutoring support, and that those young people would be able to achieve as much as possible, despite the impact of the pandemic on their learning.*" The aim is to "*narrow the attainment gap, always present in education, likely heightened due to the Covid-19 restrictions.*" The coordinator hoped the ELTI will help pupils with "*engagement with education, and a building of confidence in the young people involved in the tutoring.*"

According to evidence from the project documents, a secondary goal was "*to create employment opportunities as tutors for local young people who have recently graduated and are unable to secure employment in the current circumstances.*" The tutoring was delivered in partnership with the six secondary schools in East Lothian. Interviews with the project coordinator indicated that the ELTI was only delivered in East Lothian due to time and resource constraints. They also indicated that, given the time constraints, it was convenient to recruit schools in East Lothian because they had contacts in East Lothian schools. The choice of authority was also influenced by one of the funder's interests in the local area.

4.2. Key principles

Evidence from documents indicates that the ELTI was based on two main principles following discussion with several organisations that had experience delivering tutoring and other initiatives supporting disadvantaged young people in school.

a. Effective partnership with classroom teachers
    -   Tutoring is seen as an additional tool for classroom teachers, and it is made clear that the qualified professional is in the driving seat of the student's learning.
    -   Classroom teachers will set out the learning gaps that they would like the tutor to work on, and the teachers can track progress through the online portal.
b. Effective recruitment and training of tutors
    -   Tutors will have undergone a rigorous recruitment process and a comprehensive training programme before being able to tutor.

According to interview responses from the Project Coordinator, the ELTI followed some key principles from the literature and "*drew on the frameworks that had been developed by Tutor Trust to develop the recruitment and training of local tutors. The 'My Tutor' element of the initiative was already set up to run according to these principles*." Where possible tuition had "*close alignment with classroom learning*" and "*teachers were also encouraged to give some direction on what should be covered in the tutoring*." In line with this principle, the ELTI had designated teachers in each participating school and support from the Quality Improvement Officer from the local authority.

In addition to these principles, the ELTI had two main coordinators, one with overall responsibility and another leading the local tutor programme. This approach ensured harmonised communication between partners and provided defined point of contact for information relating to ELTI.

4.3. Approach to Delivery

Online

The initial approach of the ELTI aimed at delivering tuition through online platforms and face-to-face sessions. However, due to changes in the trajectory of the pandemic and subsequent school closures, the face-to-face element was dropped, with all tutoring delivered online. Two main tutoring groups were contracted to deliver the tutoring programme. These were a Local Tutor group and My Tutor.

Local Tutor – Queen Margaret University

Local Tutors were recruited and trained by Queen Margaret University (QMU). According to the local tutor coordinator at QMU, tutors were recruited using a variety of advertisement mediums such as QMU recruitment website, local Facebook pages, and University widening participation contacts. To be eligible for recruitment it was essential that ELTI tutors: held a degree in any subject, had a passing grade at Scottish Higher level in the subject in which they intended to be a tutor, and have experience working with young people in either an education or community setting. Applicants that met the eligibility criteria and were invited to interview had to complete a pre-interview task which involved creating a mock session plan for their specific subject. Upon completing the pre-interview task, applicants were invited to an online interview where they were questioned on the mock session plan and assessed on their answers to three competency-based questions about working with young people in a tutoring capacity. Those who were successful at the interview stage "*received training in working with young people, facilitation techniques, SQA subject-specific training, practical sessions in running tutoring, GDPR, how to use technology for tutoring, child protection, situation of schools and education at the time.*" The local tutor coordinator at QMU also indicated that tutors had to complete one full day of training, three online training sessions (between 1.5-2 hours each), 6 training videos (20 minutes each), and two online courses. Tutors also had the opportunity to attend two drop-in sessions, but this was not compulsory. The online sessions were facilitated by QMU and East Lothian Council for General Data Protection Regulation (GDPR) reasons.

Overall, the local tutor approach was new and in line with the secondary objective of providing employment opportunities for recent graduates who could not secure employment due to the COVID-19 pandemic. The original plan was for all delivery by local tutors to be face-to-face. However, due to subsequent school closure and reintroduction of remote learning in January 2021, all Local Tutor tuition was delivered online to students at home. As a result, pupils received tuition on either a one-to-one basis or in small groups of up to three pupils.

My Tutor

My Tutor is an online private tuition company focusing predominantly on pupils from disadvantaged backgrounds. The Education Endowment Foundation recommended them as partners to the ELTI programme because of their experience working in schools that receive Pupil Premium funding in England. According to My Tutor, they recruit university students who "*achieved top marks at school and studying a related subject at university.*" Tutors are all individually interviewed and go through a sixteen-module training course. Their tuition platform is built to "*allow schools to manage tuition programmes, full visibility over the programme, including tracking attendance, viewing tutor feedback, and sharing resources.*"

My Tutor indicated that their tuition programmes are usually 8-12 sessions in length, generally working as one lesson (55 mins) per subject per week. This, they claimed, is based on their experience, that students, on average, improve by a grade when receiving around ten sessions of tuition. Sessions are intended to fit around school timetables and complement pupils' work in school. My Tutor was originally planned to be delivered online. Tuition was provided on a one-to-one basis through their digital platform.

4.4. Eligibility and Selection of participants

ELTI was aimed at 4th – 6th-year pupils from disadvantaged backgrounds. To be eligible, pupils must have met one of the following criteria:

- Low-income background: (for instance, entitled to Education Maintenance Allowance (EMA), free meals in school, or where the family is entitled to a benefit such as Universal Credit);
- Time in care or being looked after or estranged;
- Young carer (YC): a young person who cares, unpaid, for a friend or family member who, due to illness, disability, a mental health problem or an addiction, cannot cope without their support;
- Live in one of Scotland's 20% most disadvantaged communities as defined by the Scottish Index of Multiple Deprivation (SIMD20); and
- Other factors include Additional Support Needs (ASN), non-attenders, students from another 'at risk' group, and students with mental health issues.

According to the project documents, projections provided by East Lothian Council indicated that 384 pupils met the above criteria. The goal was for schools to prioritise young people who met the set criteria for referral to the tutoring initiative. However, schools had some flexibility to include pupils who did not directly meet any of the criteria but faced significant learning barriers and would benefit from the programme.

Case Study of selection decisions:

Below is a case study of how teachers in two schools selected pupils for the programme:

School A:

> *I started by compiling a list of pupils who were eligible for free school meals. I then spoke to the Guidance Teacher to find out if there were any seniors who were experiencing financial difficulties and added them to the list. After that I worked with the Guidance Teacher to find out if there were any pupils who had experienced mental health issues during the lockdown or any other significant barriers to their learning during lockdown.*
>
> *A total of 69 students were initially offered tuition and 32 accepted to take part.*
>
> *There was a variety of reasons given by pupils as to why they did not decide to take part. These were: they didn't think they needed it, didn't want to take the place of someone who needed it more, nervous about one-on-one tuition, couldn't guarantee they could make the weekly meetings, and concerns about accessing the website/meets.*

School B

> *I selected students by firstly collating a list of our EMA, FSM, YC and care-experienced pupils in S4-6. I then looked at our October tracking reports for the students on the list. If there was a subjects(s) that they were below target in, then they became eligible for tutoring in that subject(s). This originally gave me around 30 students who were eligible through personal data and attainment. However, as tutoring was being offered when school was already closed in January, my only way of contacting students was through email. These 30 students were offered tutoring via email, and their parents received an email to inform them that their child was being offered tutoring.*
>
> *15 of these 30 students did not respond to the emails or turn up to tutoring sessions. Both they and their parents were sent reminders but we heard nothing back. I then*

turned to the subject teachers and asked if they had other students (regardless of socio-economic status) who would benefit and started running through pupils.

Of those who did not accept tutoring places, I only heard back from two. One said they were already too stressed with 'live lessons' on Google Meet and the independent work they had been set by teachers. The other said they were doing well in their subject, and despite their teacher's opinion, they did not need extra help.

4.5. Factors that supported setting up of ELTI

The ELTI project coordinator highlighted the following key factors that enabled the ELTI to be implemented:

a. Adequate funding from supportive and flexible funders
b. Support from the Education Authority and the headteachers
c. Commitment from teachers in school
d. Having good project coordinators
e. Recruiting good tutors.

4.6. Challenges to setting up ELTI

The project coordinators identified several challenges to the development and implementation of the ELTI.

Negotiation with Local Authority and Schools

Adequate time was required to undertake negotiations with the local authority and schools about the nature and delivery of ELTI. According to the project coordinator, there were negotiations with the local authority around "*GDPR and the appropriate Platforms for delivery of remote sessions.*" The coordinator also noted debates about whether tuition was the best way to address the educational challenges with "*some policy makers keen to take a different approach to address some of the educational challenges caused by COVID-19.*" Further, discussions were held about who should deliver tuition, with some professionals voicing concern about "*tutoring being delivered by people who were not qualified teachers.*"

Covid-19 related challenges

The project coordinator indicated that the initial proposal for the ELTI was for the My Tutor sessions to be delivered online with pupils staying after school in a classroom or computer suite and engaging with their online tutors. The local tutors, on the other hand, were to provide face-to-face tuition in the school. However, due to further Covid-19 restrictions and the second round of school closures, the local tutors switched to delivering their sessions online. This required a rapid change in plan, and tutors, school staff, and coordinators had to adapt to the new initiative. This, according to the project coordinator "*affected attendance at sessions, particularly for some schools who had hoped to engage pupils in the sessions while pupils were in school*" and as a result "*was much harder to encourage engagement with the tutoring.*"

Staff capacity

The continually changing Covid-19 regulations placed an additional burden on staff who had to adapt learning from in-person to online several times. According to the project coordinators, uncertainties around changing regulations, school closures, and assessment arrangements "*created a lot of extra burden on schools and teachers, which made it even more difficult to introduce a new initiative.*" As a result, "*the link teachers in the schools were incredibly pressed for time and could not always dedicate the time necessary to the tutoring initiative.*"

IT support and provision

As ELTI was delivered entirely online, IT challenges influenced the implementation of the tutoring programme. The project coordinators highlighted that "*technology was one of the biggest problems encountered in delivery of the programme.*" A coordinator pointed out that local authorities' IT and procurement policies interfered with allocating IT resources for the tutoring initiative citing technical and security issues. When explaining IT issues, the coordinator stated:

> "*this challenge resulted in a delay to the start of tutoring until January 2021. My Tutor was ready to get started in October 2020 and preparation had begun with schools before the October holiday. Although My Tutor were already operating with their platform in many schools and authorities elsewhere in the UK, [the local authority] was not happy with provisions around technical and security issues – and initially refused to allow the initiative to continue. After several weeks of negotiation, they agreed that everything was OK, but this meant that implementation was delayed.*"

For future iterations of similar initiatives, the coordinator recommended that "*a common IT platform can be developed that makes it easier to deliver across every school that wants to engage with this*" and "*all aspects of technology to be used need to be tried and tested before starting sessions.*" The coordinator points out that "*it is vital to get local authority buy-in across the board, particularly from IT departments to act as facilitators rather than blockers.*" This sentiment is reflected in pupils' feedback citing IT issues as a problem that potentially lowered attendance. IT support should be provided to the tutors, pupils, and administrators arranging the sessions.

Communication with Pupils

With pupils learning online and from home, communicating with them and encouraging them to engage with tuition was challenging. The project coordinator mentioned that "*with the pupils not being in school, it was much harder to encourage engagement with the tutoring*" and that "*communication with young people was difficult*" especially using emails as "*young people do not read their school emails on a regular basis*".

Adequate funding

A project coordinator pointed out that the ELTI "*is a resource-heavy provision and in order to be done properly it needs proper investment and a longer-term view.*" The other coordinator highlighted that it is "*important to have sufficient administrative resources and co-ordination to help arrange the sessions, gather data, and support the teachers and tutors with the programme.*" The ELTI made provisions for the project coordinator to be assigned a 0.5FTE contract. However, this did not allow enough time to complete the tasks required to manage the ELTI. They recommended that adequate funding and staffing are essential to the successful running of future iterations of the ELTI but noted that it would "*need to be structured differently, and done on a smaller scale/school, well-thought out, with proper planning and resource, to be a very beneficial programme.*"

Consistency in data capture and expected roles

As highlighted by the ELTI project coordinator, "*the initiative needed to more closely track the pupils on the tutoring to make sure they met the eligibility criteria, and to see how much they benefitted from the intervention.*" The project coordinators stated that "*the role of the school coordinator is key as the gatekeeper between the young people and the tutors. It would*

help if there was greater consistency in the expectations of that role and in how young people are encouraged and supported to engage with the tutoring."

5. FINDINGS: IMPLEMENTATION OF ELTI

The initial start date was planned for November 2020. However, the initiative started from the week beginning 18th January 2021 due to subsequent school closures, and tutoring was delivered until May 2021.

5.1. Subjects covered by tutoring programmes

The programmes delivered tutoring in eighteen subject areas (Figure 1), with the most common subjects being Maths (taken by 120 pupils), English (taken by 90 pupils) and Biology (taken by 31 students). All other subjects were taken by fewer than twenty pupils with four subjects, each taken by one pupil.

Figure 1: Number of students taking each subject
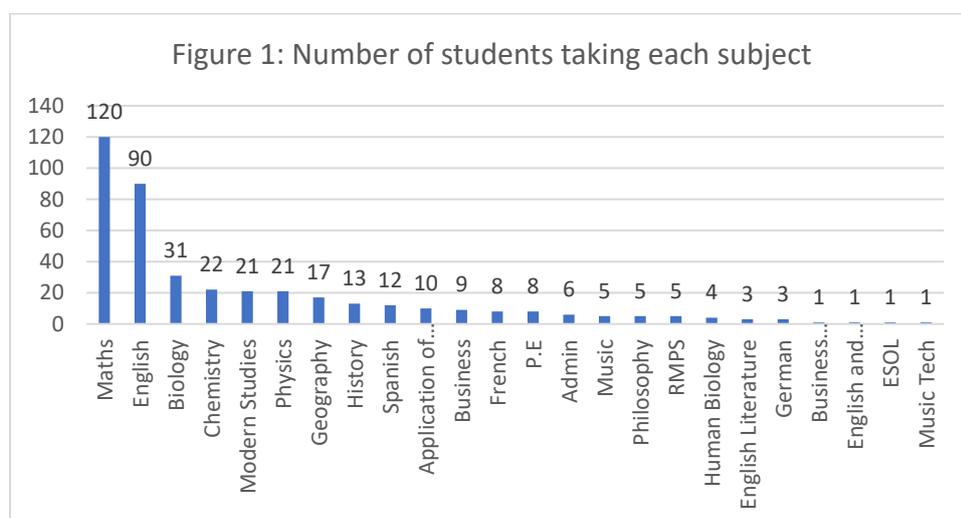
5.2. Pupils' descriptions of the tutoring process

There was considerable variation regarding the content of the tutoring sessions. Callum, who had tutors for History and Geography, noted that, "*we would have decided part of the subject to study and then you talk about it and look at some slides or something and maybe asking questions back and forth.*" In Chemistry and Maths, Stuart reported that, "*for the Chemistry I*

would like to just be all my schoolwork. So, I'd send her over all my school-work I done, and then she just went over that with me again. For Maths I would tell her what I've been doing and then she'd like go over again and look at questions from like a textbook", while his English tutor worked on "*just whatever I needed help with the most and looking at past papers*". In addition to commenting that the focus was on *"stuff that I needed to do so it would usually be stuff that I did on that day in that class that I needed to do or something so it would just be like work that has been put on Google Classroom and that's what I would have to do.*" While the focus for the three pupils and their tutors was on exam preparation, Erin also commented that the session always began with the tutor asking, "*if I was alright and that, like how I was and that.*" It was not clear from the interviews whether these differences in approach and use of the time were to do with what the tutor suggested or whether they came principally from the pupils themselves.

5.3. Enrolment on the tutoring programme by pupil characteristics

To evaluate characteristics of pupils enrolled on the tutoring programme, we used administrative data from participating schools and the tutor groups. According to the project coordinators, "none of the characteristic data is based on 'reasons for referral' as this information was not adequately and consistently collected."

Overall, about 333 pupils, constituting about 12%[1] of pupils from six schools, were enrolled on the tutoring programme. The enrolment of pupils in the tutoring programme varied among the six participating schools (Figure 2). The school with the lowest number of participating pupils enrolled 7% of all pupils while the school with the highest number enrolled 20%. Enrolment also varied by tutor groups (Figure 3). Over half of pupils (57%) were enrolled on only the local tutoring programme, while 38% were only enrolled in the My Tutor programme. About 5% of pupils were enrolled on both programmes.

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[1] The number and percentages are approximates based on a total productive school sample of 2748 pupils and 333 verifiable records of pupils who took part in the tuition programme.

Figure 2: Percentage of school pupils enrolled by school

Figure 3: Percentage of pupils enrolled by tutor group
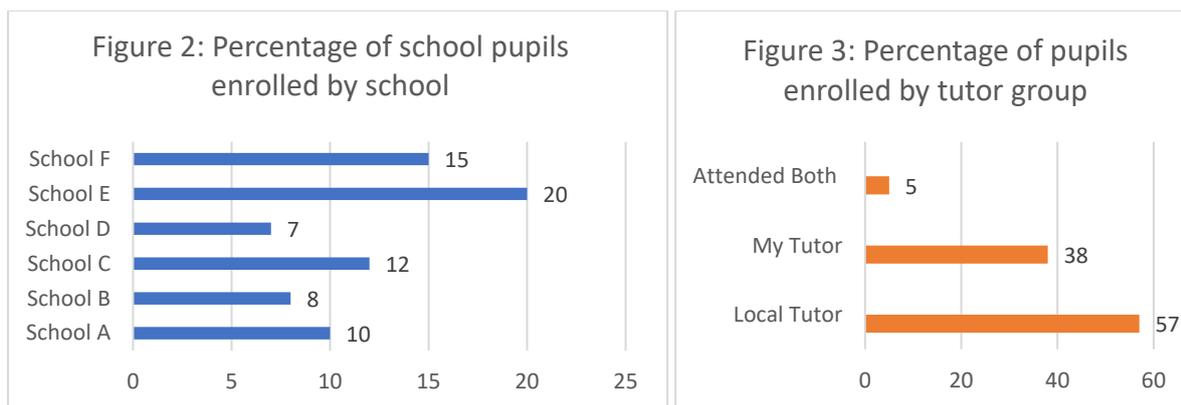
Statistical analysis[2] to determine the main predictors of enrolment indicate that pupils were more likely to be enrolled on the tutoring programme if they were registered for free school meals, came from a more deprived postcode (SIMD) and were of a White ethnic origin (Table 1). However, other characteristics (English as Additional Language, Health problems, Being Looked After and pupil Sex) did not statistically predict the probability of being enrolled on a tutoring programme (See Appendix 1).

Table 1 shows the characteristics of pupils enrolled on the tutoring programme against their overall representation in the population of school pupils. Overall, those from SIMD 1 were significantly more likely to be selected for the tuition programme, as intended. However, they constitute only 15% of all pupils receiving tutoring. Similarly, while those on free school meals were over-represented in the tuition group, they constitute only 28% of the tuition group. There was no evidence that pupils with care experience, health problems or English as an additional language were statistically significantly more likely to enrol on the tutoring programme.

Table 1: Characteristics of students enrolled on the tutoring programme

Demographic	% all pupils (n=2748)	As % received tutoring (N=333)	Significant predictor of enrolment using Logistic regression
Sex			No
Male	51	51	

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[2] Analysis using logistic regression (see the result in Appendix A)

Female	49	49	
Ethnicity			Yes
Other Ethnic Background	3	1.5	
White	97	98.5	
Eng as Add Language			No
Yes	3	5	
No	97	95	
Looked After			No
Yes (current & before)	3	4	
No	97	96	
SIMD Quintiles			Yes
1 Most deprived	5	15	
2	25	34	
3	21	20	
4	26	21	
5 Least Deprived	23	11	
FSM			Yes
Yes	10	28	
No	90	72	
Health problems			No
Yes	19	22	
No	81	78	

5.4. Number of subjects taken by school and pupil characteristics

Most pupils received tutoring in one subject (80%), with about 16% receiving tutoring in two subjects (Figure 4a). A smaller proportion (4%, about 14 pupils) received tutoring in three or four subjects.

Figure 4a: Percentage of pupils who took one or more subjects
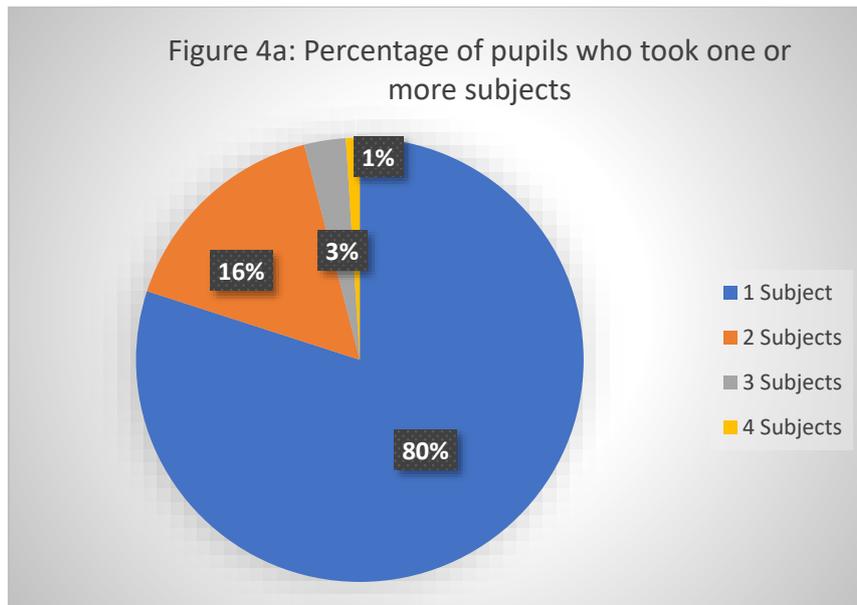
Figure 4b shows this distribution across schools, and this indicates that in most of the participating schools (four out of six), pupils took either one or two subjects. Only one school had more than half of pupils taking two or more subjects.

Fig 4b: Percentage of pupils who took more than one subject across different schools
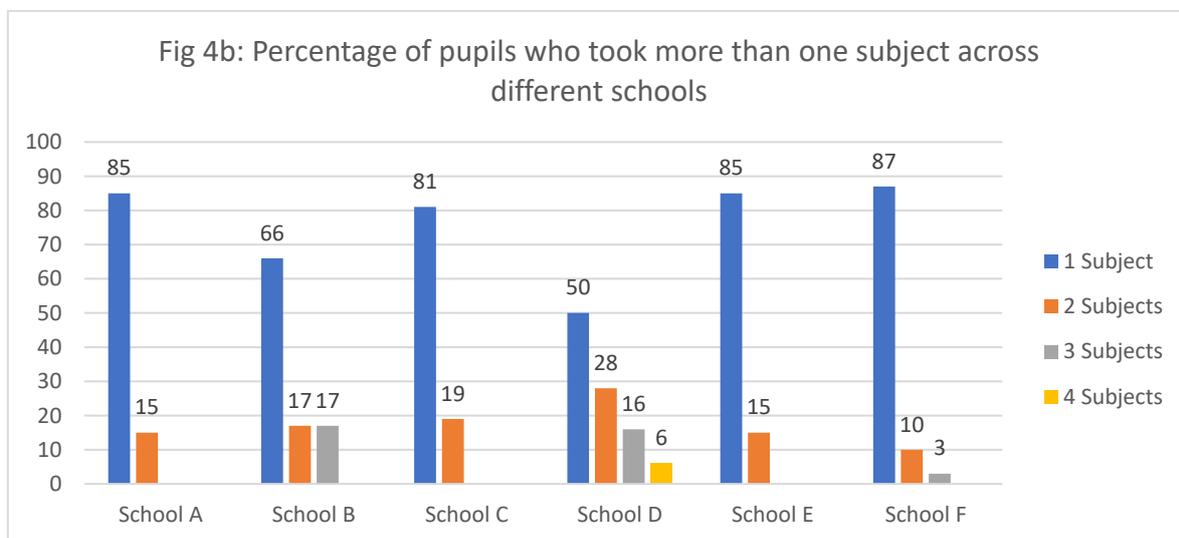
Results from the statistical analysis[3] to determine whether the likelihood of receiving tutoring in more than one subject depended on pupil characteristics found that both SIMD and pupils' medical health conditions were associated with receiving tutoring in more than one subject (Appendix 2). As shown in Figure 5, pupils from affluent areas (e.g., SIMD 5 – 34%) were more likely to receive tutoring in more than one subject than those from deprived areas (e.g.,

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[3] Analysis using logistic regression (see the result in Appendix)

SIMD 1 – 18%). However, Figure 6 shows that pupils with medical conditions (33%) were more likely to receive tutoring in more than one subject than peers with no medical condition (16.5%).

Figure 5: Percentage of pupils taking one or more subjects by pupil SIMD

Figure 6: Percentage of pupils taking one or more subjects by pupil medical condition
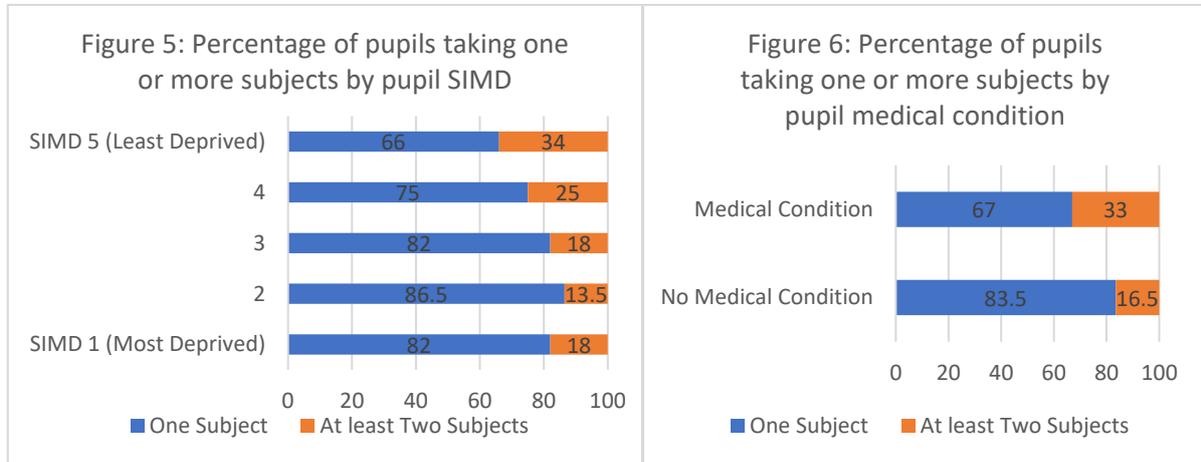
5.5. Number of tutoring sessions offered by tutor group and pupil characteristics

Overall sessions offered

The number of tutoring sessions offered varied across pupils and subjects[4]. For example, the highest number of tutoring sessions offered in a single subject was 19 lessons (to one pupil), while the lowest number of lessons provided in a subject was one (to 8 pupils). The most common number of tutoring sessions was two (offered to 61 pupils), with 13 lessons being the second most common number of sessions (offered to 40 pupils).

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[4] This is for a single subject and not those taking multiple subjects
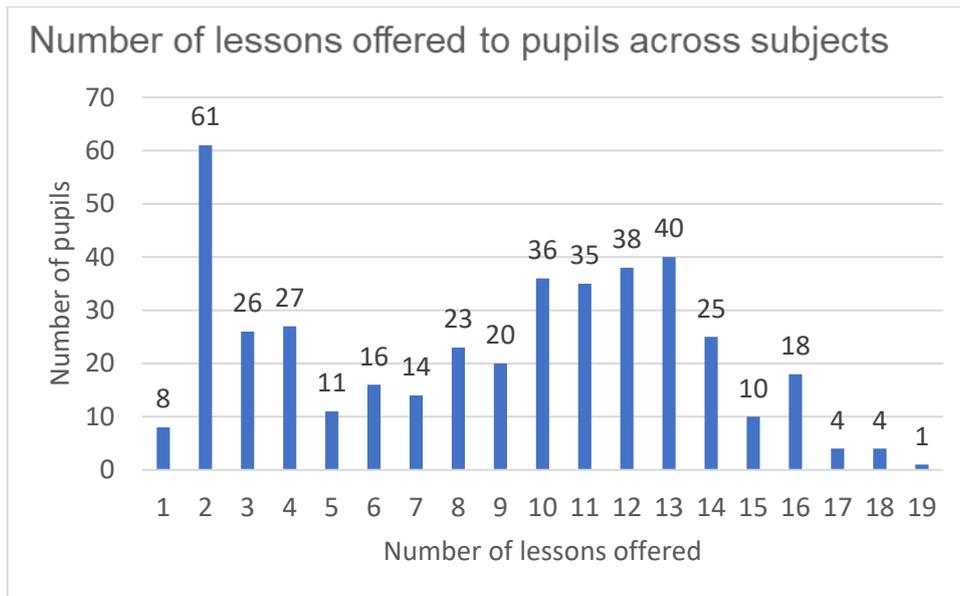
Figure 7: Number of sessions offered to pupils across subjects

Sessions offered by tutor groups

Figure 8 shows differences between tutoring groups in the number of lessons offered. Overall, the Local Tutor group offered two to four more tutoring sessions than My Tutor. However, Local Tutor groups also offered more sessions (from 15 to 19) than My Tutor (highest 14 lessons). There was higher variability in the number of lessons offered by the Local Tutor Group than those offered by My Tutor.
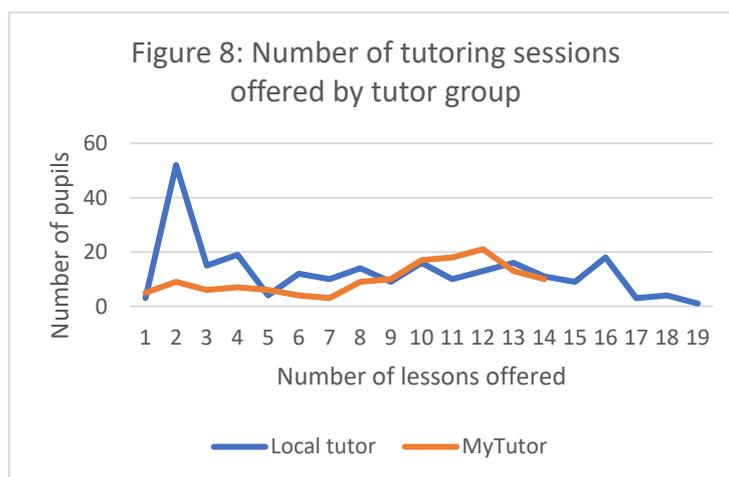
Number of tutoring sessions offered by pupil characteristics

Results from the statistical analysis to determine whether the number of sessions offered varied by pupil characteristics[5] showed that pupils from more deprived backgrounds (SIMD 1 & 2) were less likely to be offered a higher number of sessions than those from the least deprived backgrounds (SIMD 4 & 5). This analysis considered all other background characteristics and the number of subjects taken (Appendix 3). On average, those from the most affluent backgrounds were offered 15 tutoring sessions, while those from the most disadvantaged backgrounds were offered nine sessions (Figure 9).

Figure 9: Average Lessons Offered by Pupil SIMD

SIMD 1 (Most Deprived)	2	3	4	SIMD 5 (Least Deprived)
9	9	11	13	15
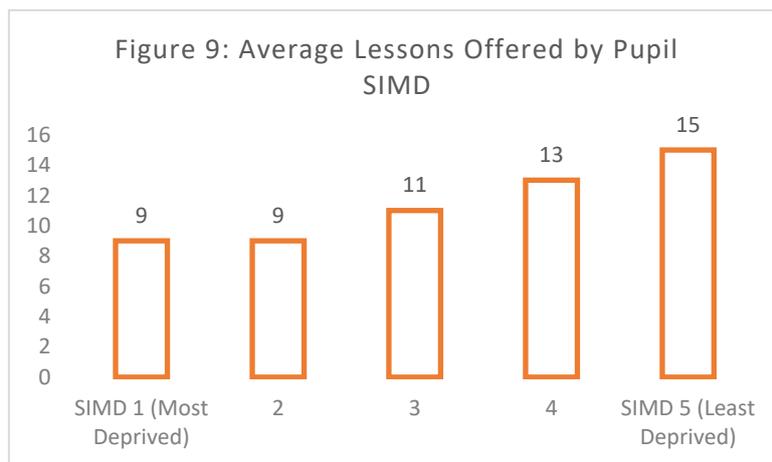
Reasons for differences in the number of sessions offered

After consulting with the project coordinators, they explained that the different number of sessions offered to pupils was likely due to several reasons:

1. At the start of each tuition block, all pupils are offered the same number of sessions, but the number of sessions could differ depending on when the pupil joined the tuition programme. If a pupil joined late, they could only be offered the remaining sessions from that block.

2. If a pupil had not engaged with tuition and missed the first two sessions, the tuition would be offered to a different pupil. In this situation, the initial pupil would be offered two sessions while the replacement pupil would be offered the remainder of the sessions for that block.

3. Lack of staffing was cited as a possible issue, as in some instances, lack of pupil engagement remained unnoticed. Sessions that should have been cancelled appeared as though they were still going ahead.

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[5] Analysis using multiple regression. See Appendix B

4. Attrition is a possible factor in the number of sessions offered. When pupils no longer requested sessions, their remaining sessions were cancelled, which lowered the number of sessions offered.

5. Upon returning to in-person learning, schools faced administrative difficulties due to their workload. This meant that monitoring attendance and scheduling tuition sessions became difficult and "sporadic", affecting the number of sessions offered.

5.6. Level of Attendance by pupil characteristics

Attendance by pupil characteristics

To determine the pupils' level of attendance at tutoring programmes, we computed percentage attendance for each pupil (i.e., the number of tutoring sessions offered to a pupil by the number of lessons they attended). The statistical analysis[6] shows that pupils' SIMD, FSM, and care experience status were significantly associated with attendance (Appendix 4).

Figure 10 shows pupils' level of attendance[7] by sociodemographic background. Pupils from the most deprived quintiles had lower attendance levels (38%) than peers from the least deprived quintiles (67%). We found similar differences between pupils registered for free school meals (38%) and peers not registered for free school meals (51%). Pupils currently or previously looked after also had lower levels of attendance (29%) than peers with no care experience (48%).

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[6] Analysis using multiple regression (see result in Appendix)
[7] Proportion of lessons attended taken it account the number of lessons offered to the pupil in a specific subject

Figure 10: Level of tutoring attendance by pupil characteristics
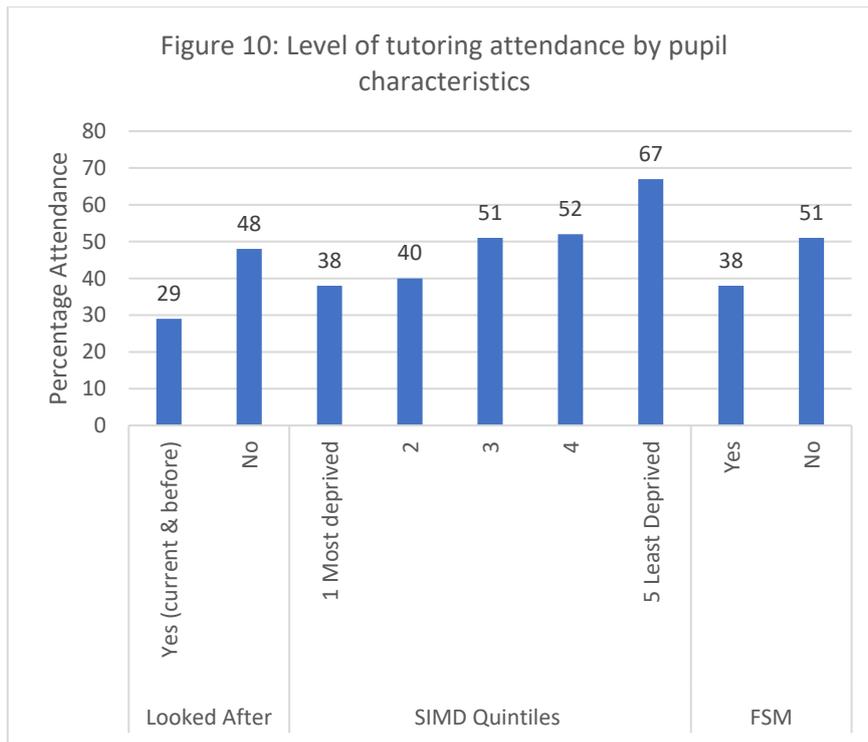
Attendance by tutor groups

The statistical analysis[8] indicates no significant differences in pupils' level of attendance by tutor group (Figure 11). Attendance was similar for pupils enrolled on only My Tutor (46.4%) and Local Tutoring programmes (47.3%). Although rates appear slightly higher for pupils enrolled on both programmes (51.8%), this difference was not statistically significant.

Figure 11: Attendance by tutor group
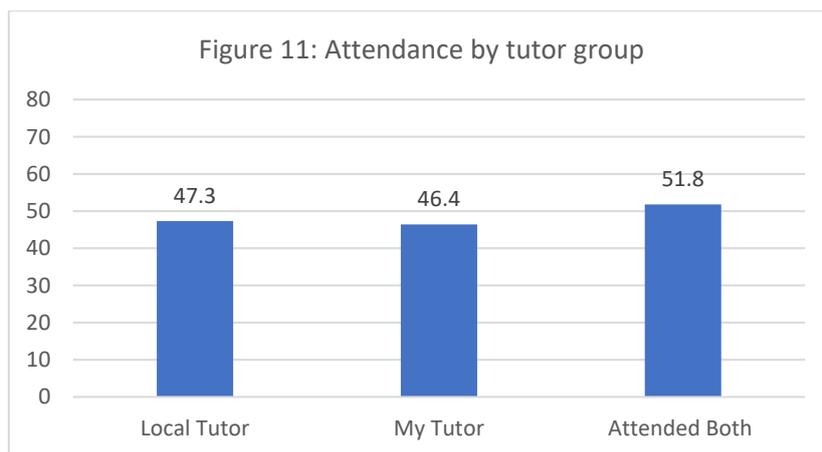
Attendance by school attended

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[8] Using ANOVA test

Descriptive results also indicate differences in the level of pupil attendance by the school (Figure 12). Attendance was highest and above 50% for pupils from Schools A, B, and F. Schools C, D and E had attendance rates below 50%.

Figure 12: Attendance by school

School	Attendance
School A	50
School B	60
School C	37
School D	44
School E	45
School F	52
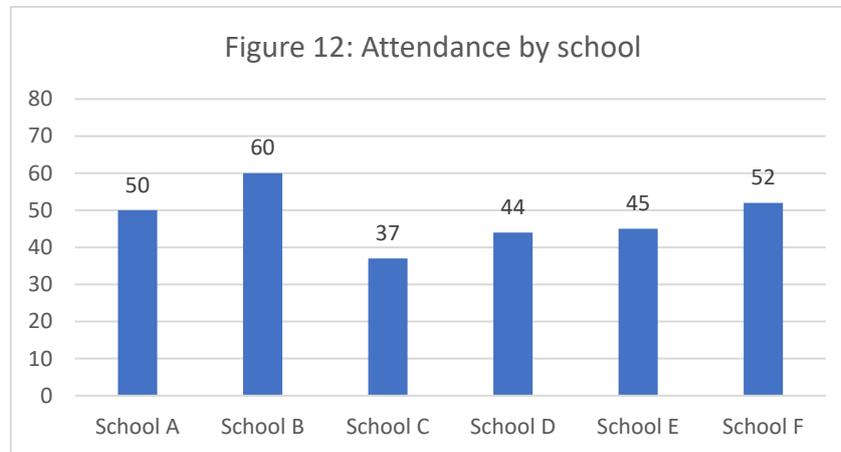
6. FINDINGS: PUPILS PERCEPTION OF IMPACT OF ELTI ON THEIR LEARNING AND ASPIRATIONS

Due to limited availability of comparable achievement data prior to pupils enrolling in the tutoring programme, it was impossible to investigate the tutoring programme's impact on pupils' achievement. However, the survey data provided us with valuable information on pupils' experiences and subjective evaluations of the tutoring programme.

6.1. Pupils' perceptions of the impact of tutoring on their Ability, Confidence, and Exam Readiness

Pupils who received online tuition were asked in the survey (n = 79) about the extent to which they thought tutoring benefitted their ability, confidence, and exam readiness in the subjects in which they received tuition (Figure 13). Over half (55%) of pupils reported that online tuition improved their ability and exam readiness "a lot" or "by a very large amount". In addition, 40% reported that their confidence in the subject improved "a lot" or "by a very large amount" as a result of the tutoring.

Figure 13: Pupil perceptions of how tuition benefitted them (n=53)
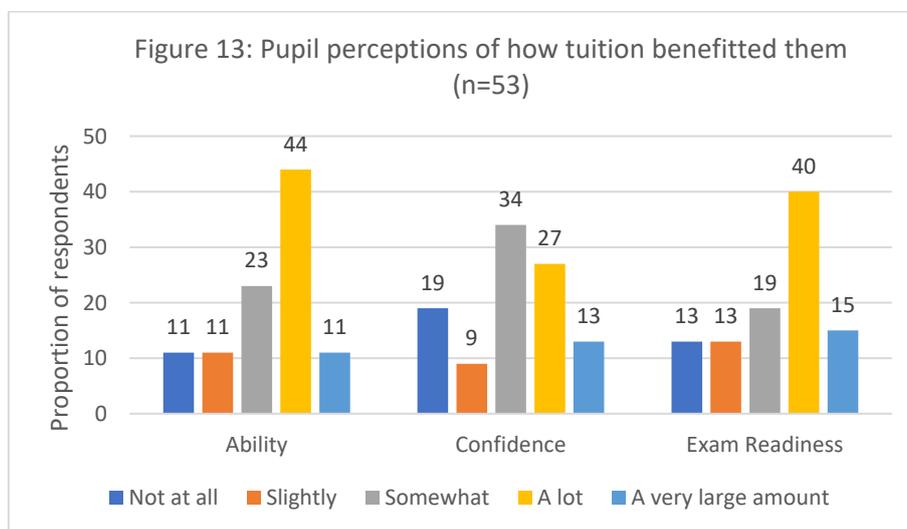
Is pupil self-reported free school meal status associated with their perceptions of tuition?
Our statistical analysis[9] found no statistically significant difference in perceived learning outcomes between pupils who reported that they were registered for free school meals and those not registered for free school meals.

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[9] Nonparametric analysis using the Mann-Whitney U Test

6.2. Pupils' perceptions of the impact of tutoring on their aspirations: Staying on at school, applying for HE or for a job

Among the pupils who received tutoring and completed the survey, 73% (38) said that they planned to stay on at school after this year, 21% (11) said that they planned on entering Higher Education, and 6% (3) said that they planned on getting a job.

Pupils were asked whether taking part in the tuition made it more likely to stay on at school, continue into Higher Education, or get a job. Figure 14 indicates that, as a result of online tuition, 9% reported that they were "likely" or "extremely likely" to stay on at school, 12% said that they were more likely to apply to go to college or university, and 14% indicated that they were more likely to apply for a job.

Figure 14: Perceived impact of tutoring on aspirations
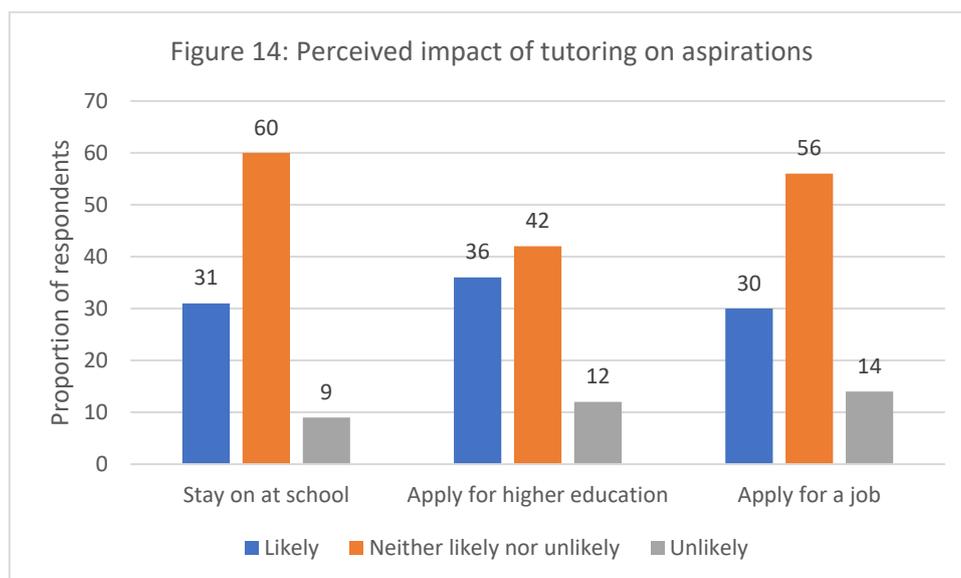
*Is pupil self-reported free school meal status associated with their aspirations?*
Results from the statistical analysis[10] found no statistically significant difference on impact on aspirations between pupils who reported that they were registered for free school meals and those not registered for free school meals.

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[10] Nonparametric analysis using the Mann-Whitney U Test

6.3. Pupils' overall evaluation of tutoring: Usefulness and likelihood of accepting tutoring in future

The survey asked pupils whether they thought tutoring was useful and whether they would participate in the future. Overall, 81% of pupils reported that they found the tuition "useful" or "extremely useful", and about 60% said they were "likely" or "extremely likely" to enrol in the tutoring programme again (Figure 15 & 16).

Figure 15: Useful

Figure 16: Future tuition
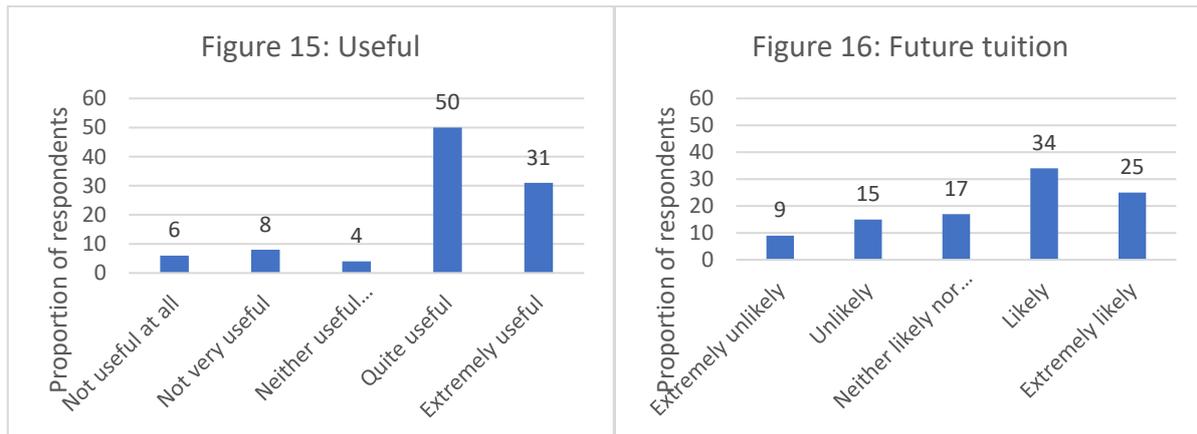
Does pupil self-reported free school meal status influence perception of usefulness and intention to accept tutoring in future?

Results from the statistical analysis[11] found no statistically significant difference in perceptions of usefulness or intention to accept tutoring in future between pupils who reported that they were registered for free school meals and those not registered for free school meals.

6.4. Perceptions of ELTI impact by project coordinators

Process and Impact

The project coordinators indicated that they were pleased with the overall outcome of the first iteration of ELTI because they could reach several pupils with no access to tuition and cover different subjects during a challenging context of school closures. *"There were a significant number of young people who took part, and tutoring was provided across a wide range of subjects and at different levels."* They also highlighted informal positive feedback of the tutoring from teachers, parents, and pupils: *"the vast majority of the feedback we received from*

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[11] Non-parametric analysis using the Mann-Whitney U Test

teachers, parents and students suggested that it had made a significant impact on the young people's education."

7. CONCLUSION AND RECOMMENDATIONS

The ELTI was developed as a rapid response initiative to the COVID-19 school closures. The initiative was implemented within a changing policy context. This meant that planned timelines of delivery, mode and evaluation processes had to be adapted to this changing context.

7.1. Development, enrolment, and attendance

A key aspiration behind ELTI was to support 4th to 6th-year pupils from disadvantaged backgrounds preparing for exams. Our process evaluation suggests that teachers aimed to recruit students who met the inclusion criteria. Further, analysis of enrolment data shows that pupils from deprived areas and those registered for free school meals (FSM) were about two to three times more likely to be selected to take part in tutoring, ***findings consistent with key objectives of the ELTI programme***. However, our analysis also revealed that many pupils not registered for FSM or from disadvantaged areas enrolled on the programme. Several reasons may account for this. First, schools noted that they offered tutoring sessions to other pupils when those in the target group did not accept the offer. Second, the original proposal for ELTI eligibility indicated flexibility to select pupils whom schools think may benefit from the programme. Recruitment and retention of pupils from disadvantaged backgrounds to interventions can be challenging (Stateva et al., 2012). In most cases intervention opportunities do not reach the target populations and are taken up by those who may not be the original target (National Audit Office, 2021; The Education Committee, 2021). ***A key challenge is how programmes can attract and retain intended beneficiaries. Achieving these goals should be a key part of any programmes designed to benefit those from disadvantaged backgrounds***.

Apart from enrolling more pupils from disadvantaged backgrounds, we found significant socioeconomic inequalities in the delivery and pupil attendance at tutoring sessions. Overall, pupils from less advantaged backgrounds were offered fewer tutoring sessions, were less likely to take more than one tutoring subject and were less likely to attend tutoring sessions than peers from advantaged backgrounds. The reasons for these disparities are likely to be multi-faceted. For instance, pupils from disadvantaged backgrounds may be offered fewer sessions because of non-attendance or because there were no mechanisms as part of the tutoring design to address existing barriers to attendance. The ELTI project coordinators confirmed this, suggesting reasons such as attrition and reallocation of sessions to those showing consistent

attendance. These findings are not unique to the current tutoring programme and are familiar to programmes designed to serve pupils experiencing disadvantage (National Audit Office, 2021; The Education Committee, 2021). As a result, *future tutoring programmes need to ensure, as a minimum, equity in the number of sessions available to all pupils,* given that they have control over the number of sessions to offer. *Achievement of this goal should be a crucial marker for success*. This is also important for ensuring that all participants receive the intervention precisely as intended (intervention fidelity). Additionally, *future initiatives to support pupils experiencing disadvantage should include mechanisms for addressing barriers to participation*. For instance, programmes can incorporate knowledge from existing evidence on barriers to participation or build a mechanism for finding out and addressing barriers to non-participation as part of the intervention. Overall, *enrolling pupils on tutoring is a necessary but not sufficient condition.* There is a need to address the barriers to engagement to utilise tutoring to bridge learning gaps fully.

One of the key lessons from the evaluation process was the difficulty associated with consistent data to aid the evaluation of the intervention. While the context of the ELTI setup may have contributed to some of the challenges, we recommend that *future programmes build a consistent data collection platform*. For example, schools should document their processes of offering and assigning tuition to help understand their rationale for selecting pupils for the tuition programme. Similarly, tuition providers must commit to the robust recording of implementation data at the pupil level and across time to enable a clearer understanding of the nature of the tuition provision, rationale for enrolment, characteristics of tutees, duration of tutoring, attendance and training of tutors. Particular attention should be paid to the format and accuracy of data capture. Given that different programmes deliver tutoring, there should be an agreed format of data capture to ensure consistency across programmes.

A key element of the ELTI was that it had two main coordinators. This approach ensured harmonised communication between partners and provided defined point of contact for information relating to programme. We therefore recommend that future programmes include *a designated coordinator to facilitate communication between partners, provide a central point of contact, and ensure consistency of approach across school*.

7.2. Parental engagement to improve recruitment and attendance of target groups

Pupil attendance is a common problem for tuition interventions. To increase pupil attendance, engagement, and the overall efficacy of the tuition intervention, ***schools, tutors, and coordinators should work to engage parents to get their support and buy-in for the tuition programme***. Evidence suggests that engaging parents in their children's education can increase attendance at online tuition sessions (Marshall, Bury, Wishart, Hammelsbeck, & Roberts, 2021). ***Engagement will also help understand and address barriers*** to recruitment and retention, especially of pupils from disadvantaged backgrounds. There are known barriers limiting the extent to which parents engage with their children's learning. For example, there is evidence that parents lack the confidence to use the technology required to support children learning at home (Treviño, Miranda, Hernández, & Villalobos, 2021). This is a significant barrier to overcome with online learning. Parents can also lack an understanding of the content their children must learn and feel they cannot assist (Ellison-Lee & Coates, 2019). ***One approach to reduce these barriers and improve parents' engagement is to use flexible communication channels***. Am emerging approach that has shown promise is the use of text messages to improve children's attendance and achievement (Miller et al., 2016). This could be particularly useful for online tuition as online courses have significantly higher attrition rates than face-to-face courses (Freidhoff, 2017). Furthermore, technical support for parents to help set up the equipment for pupils to attend their online tuition sessions can help improve attendance (Marshall et al., 2021).

7.3. Evaluating impact of ELTI on pupil learning and aspirations

The survey responses provided some insight into pupils' perceptions about the impact of the tutoring programme on their learning. There was evidence from ***most pupils that the online tuition improved their ability and exam readiness a lot or by a very large amount***. A sizeable proportion reported that their confidence in the subject improved a lot or by a very large amount because of the tutoring. Regarding aspirations, a smaller proportion of respondents thought participating in the tutoring programme impacted their aspirations to stay on at school, aspire to enter Higher Education or apply for a job. We found no significant differences between socioeconomic groups in their perception of the impact of tutoring on learning or aspirations. Survey respondents' ***overall evaluation of the tutoring experience was positive***. Most pupils

reported that they found the tuition useful or extremely useful, and about 60% said that they were likely or extremely likely to accept tutoring again if it was offered to them.

An important question for the current evaluation was the extent to which ELTI impacts pupils' educational achievement, and the extent to which it has contributed to closing socioeconomic achievement gaps. An answer to this question was not possible due to difficulties in gaining comparable achievement data prior to the intervention. Addressing the ***challenges of prior and post-intervention achievement data should also be prioritised*** to enable a robust evaluation of the impact on pupil achievement. Future programmes must seek ***commitment from all partners to capture comparable achievement data before and after interventions to enable robust evaluation of impact on pupil achievement and the extent to which the intervention narrows inequalities in achievement.*** For instance, as a requirement for participating in the tutoring programme, schools should commit to providing achievement data for both pupils who take part in tuition and those who are not enrolled to enable evaluation of a 'tuition effect' on pupil achievement. The nature of the data to be provided should be agreed upon at the outset with schools to give them enough time to collate and share the required data. Finally, ***programmes should build a robust evaluation design at the outset,*** such as randomised control trials or inclusion of control groups.

7.4. Changes implemented to current delivery of ELTI

The current evaluation of ELTI was conceptualised as a formative process with the aim to help shape and improve the design of subsequent delivery of the ELTI. An initial interim report produced highlighted several key strengths and challenges that needed to be addressed. The project coordinators' responses to a post hoc open-ended questionnaire indicated several changes made to the ongoing delivery of ELTI as a result of the interim report from Strathclyde University. These can be summarised as follows:

- Better systems in place for recruitment of pupils to the initiative
- Better tracking of attendance
- Better tracking of eligibility of pupils
- More structured delivery of the programme
- More structured allocation of sessions/pupil

- Seeking and attracting more staff resources to enable the local tutoring programme to undertake more systematic data on the implementation process.

7.5. Key Highlights

- ELTI was developed as a rapid response initiative to address the COVID-19 school closures and support 4th to 6th-year pupils from disadvantaged backgrounds preparing for exams.

- Consistent with the programme's target group, pupils from disadvantaged areas and those registered for FSM were about two to three times more likely to take part in tutoring. However, we also found pupils not registered for FSM or from affluent areas enrolled on the programme.

- There were significant socioeconomic inequalities in the delivery of the ELTI and pupil attendance. Pupils from less advantaged backgrounds were offered fewer tutoring sessions, were less likely to take more than one tutoring subject and were less likely to attend tutoring sessions than peers from advantaged backgrounds.

- The evaluation team was unable to investigate the impact of the tutoring programme on pupils' achievement due to lack of comparable achievement data prior to pupils enrolling on the tutoring programme.

- Over half of the survey respondents (55%) reported that online tuition improved their *ability* and *exam readiness* a lot or by a very large amount, while 40% reported that their *confidence in the subject* improved a lot or by a very large amount because of the tutoring.

- A small proportion of respondents (less than 15%) indicated that participating in the tutoring programme influenced their aspirations to stay in school and aspire to enter higher education or seek employment.

- About 80% of pupils reported that they found the tuition useful or extremely useful, and about 60% said they were likely or extremely likely to accept tutoring if it was offered again.

7.6. Recommendations

- The ability of programmes to attract and retain intended beneficiaries should be a key design feature of future programmes to benefit those from disadvantaged backgrounds. We suggest parental engagement as a key approach to achieving this goal.

- To be successful, initiatives to support pupils experiencing disadvantage should also include approaches that address barriers to participation from disadvantaged groups. This may range from provision of necessary resources such as ICT for online activities to support for travel if that is required.

- Tutoring programmes need to ensure, as a minimum, equity in the number of sessions available to all pupils given that they have control over the number of sessions offered. Achievement of this goal should be a crucial marker for success.

- Clear communication with pupils is required about the purpose and goals of the tutoring activity.

- Communication should be established between school and tutors, involving pupils to ensure complementarity of support.

- Future programmes should build a consistent platform of data collection as well as robust evaluation designs such as randomised control trials or inclusion of control groups. Addressing the challenges of prior and post-intervention achievement data should be prioritised to enable a robust evaluation of the impact on pupil achievement.

- Appointment of a designated coordinator to facilitate communication between partners, provide a central point of contact, and ensure consistency of approach across school.

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Appendices

Appendix 1: Predicting likelihood of enrolment into tutoring

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	95% C.I.for EXP(B) Upper
Step 1[a]	LAC_2(1)	-.159	.324	.239	1	.625	.853	.452	1.611
	EngAL_2(1)	.422	.303	1.941	1	.164	1.525	.842	2.759
	FreeMeal_2(1)	1.313	.153	73.709	1	<.001	3.718	2.755	5.018
	SIMD_Quintile	-.372	.054	48.249	1	<.001	.689	.620	.766
	MHealth_2(1)	.125	.149	.709	1	.400	1.134	.847	1.518
	Ethnic_Binary(1)	1.084	.489	4.921	1	.027	2.957	1.135	7.705
	Sex(1)	-.029	.122	.057	1	.811	.971	.764	1.234
	Constant	-2.119	.520	16.600	1	<.001	.120		

a. Variable(s) entered on step 1: LAC_2, EngAL_2, FreeMeal_2, SIMD_Quintile, MHealth_2, Ethnic_Binary, Sex.

Appendix 2: Predicting likelihood of receiving tutoring in more than one subject

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower	95% C.I.for EXP(B) Upper
Step 1[a]	LAC_2(1)	.365	.637	.328	1	.567	1.440	.413	5.016
	EngAL_2(1)	-.933	1.056	.780	1	.377	.394	.050	3.118
	FreeMeal_2(1)	-.082	.325	.064	1	.801	.921	.487	1.743
	SIMD_Quintile	.229	.115	3.945	1	.047	1.258	1.003	1.577
	MHealth_2(1)	.852	.307	7.692	1	.006	2.345	1.284	4.283
	Sex(1)	-.080	.284	.078	1	.779	.923	.529	1.612
	Constant	-2.225	.428	26.966	1	<.001	.108		

a. Variable(s) entered on step 1: LAC_2, EngAL_2, FreeMeal_2, SIMD_Quintile, MHealth_2, Sex.

Appendix 3: Predicting number of lessons offered

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	95.0% Confidence Interval for B Upper Bound	Correlations Zero-order	Correlations Partial	Correlations Part	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	-3.541	1.421		-2.492	.013	-6.337	-.745					
	Sex	-.752	.631	-.046	-1.191	.234	-1.994	.490	-.068	-.066	-.045	.997	1.003
	SIMD_Quintile	.837	.264	.125	3.166	.002	.317	1.357	.242	.174	.121	.938	1.066
	MHealth_2	.303	.779	.015	.388	.698	-1.229	1.834	.143	.022	.015	.957	1.045
	LAC_2	-.933	1.580	-.023	-.590	.555	-4.041	2.176	.008	-.033	-.023	.982	1.018
	EngAL_2	.433	1.501	.011	.288	.773	-2.520	3.386	-.064	.016	.011	.955	1.047
	FreeMeal_2	-.199	.710	-.011	-.280	.780	-1.596	1.199	-.016	-.016	-.011	.974	1.027
	TotSubTaken	10.533	.597	.693	17.631	<.001	9.357	11.708	.717	.701	.673	.943	1.061

a. Dependent Variable: TotLessDel

Appendix 4: Predicting attendance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	42.055	7.272		5.784	<.001	27.749	56.361					
	Sex	-4.567	3.613	-.067	-1.264	.207	-11.676	2.541	-.068	-.070	-.067	.999	1.001
	SIMD_Quintile	6.288	1.497	.226	4.201	<.001	3.344	9.233	.244	.228	.221	.960	1.041
	MHealth_2	-3.799	4.406	-.046	-.862	.389	-12.467	4.869	-.019	-.048	-.045	.981	1.020
	LAC_2	-17.058	9.045	-.100	-1.886	.060	-34.853	.737	-.112	-.105	-.099	.983	1.017
	EngAL_2	-13.009	8.592	-.082	-1.514	.131	-29.912	3.893	-.100	-.084	-.080	.957	1.045
	FreeMeal_2	-11.745	4.067	-.154	-2.888	.004	-19.747	-3.743	-.172	-.159	-.152	.975	1.026

a. Dependent Variable: PercAttend