

<b>Pilot Evaluation Summary</b>	
Intervention Developer	School of Education, Durham University
Delivery Organisations	School of Education, Durham University
Evaluator	Ipsos MORI
Principal Investigator	Karl Ashworth
Protocol Author(s)	Karl Ashworth, Nadia Badaoui, Stella Capuano, Jaimin Shah, Adam Behailu
Pilot Evaluation Participants	The intervention will involve 6 primary schools in 4 local authorities (LAs). Within each primary school, Subject Leads and Designated Teachers will form the cohort of participants attending a series of RLC sessions and workshops. Year 5 and 6 teachers will also participate in implementing new/adjusting existing teaching strategies developed by workshop participants for their primary schools and pupils. In particular, the evaluation will target year 6 pupils who have been Children in Need (CIN) or looked after children (LAC) at any point in the last six years.
Number of Pilot Sites	5
Protocol Date	5/11/2021
Version	2 This evaluation was originally intended to be delivered as a Randomised Controlled Trial (RCT). However, due to challenges with recruitment, the study was amended to a pilot with a view to generating learnings to expand the programme and using experimental evaluation methodologies in future. The original trial protocol, published in October 2021, can be found at Appendix 2.

## Summary

The Research Learning Communities (RLC) programme aims to improve Literacy and Mathematics outcomes of Children in Need (CIN) and Looked After Children (LAC), by supporting Subject Leads, Designated Teachers, and years 5 and 6 teachers in primary schools to further develop and implement research-informed teaching strategies.

The RLC programme will be developed and delivered by the School of Education in Durham University, between November 2021 and May 2022. Although the programme was previously delivered to schools and was evaluated, it is the first time that it will be focusing on supporting teachers to develop evidence-based teaching strategies specifically for CIN/LAC.

To do so, trained facilitators will develop and deliver a series of six workshops, preceded by an introductory session, and closed by a final 'moving forward' session, with Subject Leads and Designated Teachers across 5 primary schools in 3 local authorities (LAs).

This mixed-methods pilot evaluation, funded by What Works for Children's Social Care (WWCSC), will run from November 2021 until February 2023, and seeks to examine the benefits and potential impacts of the programme on:

- CIN/LAC attainment, assessed through Year 6 CIN/LAC KS2 scores in Literacy and Mathematics, supplied by the National Pupil Database (NPD) as well as anecdotal reports from teachers;
- Designated Teachers' and Subject Leads' knowledge of academic/action research and use of academic/action research in practice;
- Designated Teachers, Subject Leads, and years 5 and 6 teachers' attitudes towards academic/action research and implementation of improved teaching practices for CIN/LAC.

In addition, a cost evaluation will be conducted to assess the costs of the programme. The pilot analysis will aim to generate learnings for the expansion of the programme and the implementation of a randomised controlled trial (RCT) to assess teacher and pupil impacts.

Data will be collected via the following methods:

- Pre and post teacher questionnaires, including proof of concept of questionnaire-based measurement scales;
- Case studies, (consisting of interviews with school leaders, Designated Teachers, Subject Leads, and year 5 and 6 teachers participating in the programme);
- Observations of RLC workshops; and
- Interviews with RLC programme delivery team and Virtual School Heads

**Note:** This evaluation was originally intended to be delivered as a randomised control trial (RCT). However, due to challenges with recruitment, the study was amended to a pilot, with a view to generating learnings to expand the programme and using experimental evaluation methodologies in future.



## Background and Problem Statement

### Background

In the past decade, there has been increased interest in using evidence to inform teaching practice. Such interest was generated following research findings which pointed to teaching practice not being systematically evidence informed, teachers relying on their own experience as evidence of what works, and the challenges of changing teachers' attitudes towards research evidence (Rickinson et al., 2021; Griggs et al., 2016; Judkins, 2014; Goldacre, 2013).

Recent research examining barriers that inhibit the uptake of research evidence among teachers cite a lack of skills to interpret and appraise research evidence, limited resources and time, limited access to evidence, and few incentives to use research evidence in practice (Brown and Flood, 2020; Speight et al., 2016; Nelson and O'Beirne, 2014; Sharples, 2013). In addition, there is often a lack of clarity regarding what 'evidence' looks like, how to apply evidence to teaching practice, and the need for better systems and structures to support the dissemination of evidence in easily digestible and accessible formats for teachers (Caldwell et al., 2015; Goldacre; 2013, McAleavy and Bennett; 2016).

Globally, a number of interventions have been introduced to support teachers with the above challenges, improve 'knowledge mobilisation' and bridge the gap between research and teaching practice (Brown and Flood, 2020). A recent review of the literature identified eight types of interventions aiming to support research-based pedagogy (Tripney et al., 2018) including:

- **Professional development interventions** – designed to upskill teachers and equip them with information literacy and research methods skills;
- **Intermediaries** – to translate evidence and make it more accessible;
- **Repositories** – to provide a location and focus for the collection, preservation, and dissemination of research outputs and information;
- **School-university partnerships** – to strengthen the links between researchers and research users, improve the flow of information, and support the use of research to inform and enhance education practice;
- **Communication strategies** – including traditional approaches, such as via peer-reviewed journals and conferences, as well as those using newer technologies and communication channels, including social media;
- **Networks** – to provide formal or informal opportunities for individuals or organisations with a common interest to engage with one another;
- **Initial Teacher Education (ITT)** – which allows a combination of academic study and time in school; and
- **Regulations, standards, and policies** – to establish accountability and regulatory mechanisms and structures designed to improve the use of research in education.

The introduction of such interventions has increased demand for projects that assess the impact that research-use in school settings has on students' educational outcomes (Caldwell et al., 2015; Bennett, 2015). Currently, however, little evidence exists on the impact of these different types of interventions on the use of research evidence in education, either in terms

of the impact on teacher engagement with research, or in terms of classroom practice and pupil outcomes (Tripney et al., 2018; Nelson et al., 2017). Moreover, existing evidence appears mixed or unclear and of poor quality (Tripney et al, 2018).

### **The Research Learning Communities (RLC) programme**

Research Learning Communities (RLC) is a professional development programme aiming to support teachers with the use of research evidence and the implementation of action research, with the ultimate goal of improving pupil outcomes.

RLC has previously been delivered in the UK, including schools which agreed to take part in the programme and their teachers and pupils from across year groups. The programme was robustly evaluated between 2014-2016 using a RCT with 119 primary schools (of which 60 were in the intervention group) and a process evaluation. The evaluation assessed RLC's impact on reading outcomes for children in Key Stage 2 (KS2) and teacher outcomes, and concluded that:

- the programme had a positive impact on teachers' disposition towards research, with some evidence that this impact may have been influenced by factors such as the level of postgraduate qualifications or seniority of teachers that took part in the intervention;<sup>1</sup>
- there was some evidence of a small positive relationship between teachers' disposition towards research and pupil outcomes, irrespective of involvement in an RLC; and
- there was no evidence that RLC improves reading outcomes for children at KS2, with some teachers suggesting that it may take a number of years for participation in an RLC to change teaching practice and improve pupil outcomes (Rose, et al. 2017)<sup>2</sup>.

Using pupil data collected as part of the RCT, sub-group analysis was conducted, focusing on children with a social worker and their KS2 results. Although the small sample sizes of children in the sub-group analysis meant the re-analysis was underpowered by conventional levels, analysis indicated that the programme did show 'signs of promise'. Analysis showed that children from this cohort who received the programme demonstrated two months' additional progress in reading attainment compared to children with a social worker in control schools (Sanders et al., 2020).

These 'signs of promise' provided the opportunity to adapt and deliver the RLC programme so that it supports teachers with the use of evidence focusing on CIN/LAC, who generally have lower educational attainment than their classmates and may have an even greater need for tailored and innovative teaching (Berridge et al., 2020). In turn, the evaluation of the adapted programme was key in order to support the evidence base in this field, which is scarce, by using a robust evaluation design and thus, providing solid evidence on the programme's impact.

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<sup>1</sup> Two small scale qualitative evaluations have also been conducted by the RLC delivery team in infant, primary, and secondary schools involving a total of 21 teacher interviews. These evaluations reported teachers' perceptions of the positive impact of the programme, including increased: teacher confidence to use research to develop new approaches to teaching and learning; capacity to lead research-informed change; improved teaching practice and perceptions of student learning behaviours and outcomes (Brown et al., 2020; Brown, 2017).

<sup>2</sup> The evaluation was funded by the Education Endowment Foundation (EEF) the Department for Education (DfE) and the Mayor's London Schools Excellence Fund as part of a round of funding exploring research use in schools.

## Intervention and Theory of Change

### Overview and rationale

RLC is a professional development programme which aims to support teachers in primary schools to implement research-based teaching strategies that have the potential to improve Literacy and Mathematics outcomes of CIN and LAC.

To do so, the programme will bring together primary Subject Leads and Designated Teachers<sup>3</sup> in a series of workshops focusing on raising their understanding and use of educational research in order to develop and implement new teaching strategies or adjust existing teaching strategies for CIN/LAC in their schools. Subject Leads and Designated Teachers are to champion evidence-informed teaching strategies and work with year 5 and 6 teachers as a means to work together to develop and implement these new/adjusted strategies.

The RLC programme is based on teacher action research, described in simple terms as planning a new teaching strategy, acting on it, observing its effects, reflecting on its effectiveness, revising plans, and repeating the cycle again (Kemmis and McTaggart, 1988). Thus, during the workshops, conceptual research needs to be translated into instrumental action in the classroom. In the workshops, teachers collaborate to review research evidence and share personal experiences to collectively make sense of its implications and applications to teaching practice. The programme intends to build teachers' understanding of research evidence by engaging teachers in:

*'a facilitated process of learning, designed to help them make explicit connections between research knowledge and their own assumptions and knowledge (Katz and Dack, 2013; Nonaka and Takeuchi, 1995). This 'culminates in the development of new practices, strategies or innovations' which 'teachers then need to practise.'* (Brown, 2017).

In this way, RLC aims to facilitate what the programme developers have previously called a 'cycle of inquiry' (Brown and Flood, 2020; Brown, 2017), whereby Subject Leads and Designated Teachers are supported to access, evaluate, and apply academic research findings to inform their own teaching and apply them.

In addition, RLC aims to support Subject Leads and Designated Teachers attending the workshops to cascade their learning to year 5 and year 6 teachers in their schools who

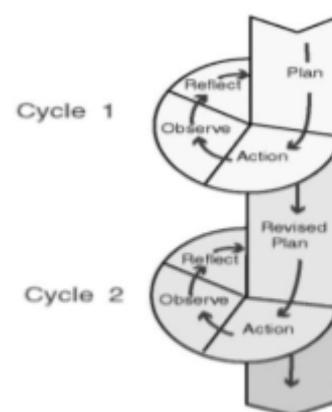


Figure 1: Action research cycle, Kemmis and McTaggart 1988

<sup>3</sup> A Designated Teacher is a teacher or a headteacher/acting headteacher in a school, who is responsible for 'promoting the educational achievement' of looked after and previously looked after children in their schools and ensuring that both policy and practice is attuned to the needs of these pupils. Designated Teachers are mandated to 'take lead responsibility for ensuring school staff understand the things which can affect how looked after and previously looked after children learn and achieve and how the whole school supports the educational achievement of these pupils.' (Great Britain. Department for Education, 2018, p.12).

support with the roll-out of new practices. For this to be successful, effective change leadership is important:

*'Initiating innovation represents the introduction of something new and potentially countercultural. As such, there is a risk that new practices are rejected by those required to adopt them. Correspondingly, the effective scale-up of research-informed interventions will be dependent on there being "the right people in the room": those most likely to make change happen in schools (those with the influence and authority to lead change)... [They must also] explicitly know both what is required to lead change effectively and their own role in making long-lasting change happen' (Brown, 2017).*

For these reasons, the programme provides participants with training on effective change leadership. It does so by building their understanding of their role in the change leadership process and offering specific strategies and techniques that they can employ in their own school contexts to ensure new practices are adopted / existing practices are adjusted.

To enhance the potential positive impact of the programme, at the outset, RLC also intends to gain the support of Head Teachers/Assistant Head Teachers, whose teachers are participants in the programme.

## Who (recipients)

The RLC pilot programme will involve 6 primary schools. Within each school, the intended recipients of the programme include specific cohorts of pupils and teachers.

### Pupils

The programme is intended to improve the outcomes of years 5 and 6 pupils who have been classified as [Children in Need \(CIN\)](#) in the CIN 2020 census or [Looked After Children \(LAC\)](#) in the LAC 2020 census in the past six years.<sup>4</sup> CIN and LAC census data are matched to the NPD, data which will be used to analyse year 6 CIN/LAC pupil Key Stage 2 (KS2) Literacy and Mathematics results in 2021/2022. If the evaluation is extended for an additional year, KS2 results for current year 5 pupils will also be analysed. Anecdotal data from teachers will also be gathered to understand the perceived impacts of the programme on all pupils.

### Teachers

The RLC programme is intended to engage each school's Literacy or Mathematics Subject Lead and its Designated Teacher. Both Subject Leads and Designated Teachers are invited to attend the RLC sessions and workshops on behalf of each school. Additionally, the programme intends to engage years 5 and 6 teachers, who are expected to support Subject Leads and Designated Teachers with the implementation of new/adjust existing teaching strategies in their schools. Years 5 and 6 teachers will not be invited to attend any of the programme's sessions/workshops.

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<sup>4</sup> CIN and LAC classifications are aligned with the Children Act of 1989. As per the Act, CIN/CLA encompasses 'all those children receiving statutory support from local authority social care, including those on a Children in Need Plan, on a Child Protection Plan, and Looked After Children.'

Virtual schools, led by Virtual School Heads (VSHs), are also involved in the recruitment of schools for the programme. VSHs work strategically across the LA they are appointed by to support the educational attendance, attainment, and progress of CIN/LAC. They do so by providing information and advice to their parents, educators, and others who the VSH considers necessary. VSHs provide training to Designated Teachers and they work closely together to support CIN/LAC as well as promote a whole-school culture to personalise learning for these children (Great Britain. Department for Education, 2021). In addition to providing support with school recruitment, VSHs will also be invited to attend the programme to support their own professional development. However, VSHs are not part of the intended beneficiaries for the programme as they will not be developing or implementing new/adjusting existing research-informed teaching practices in the participating schools. Given their strategic role in the education of CIN/LAC, VSHs' views on the programme will be consulted as part of the pilot evaluation.

### What (procedures and activities)

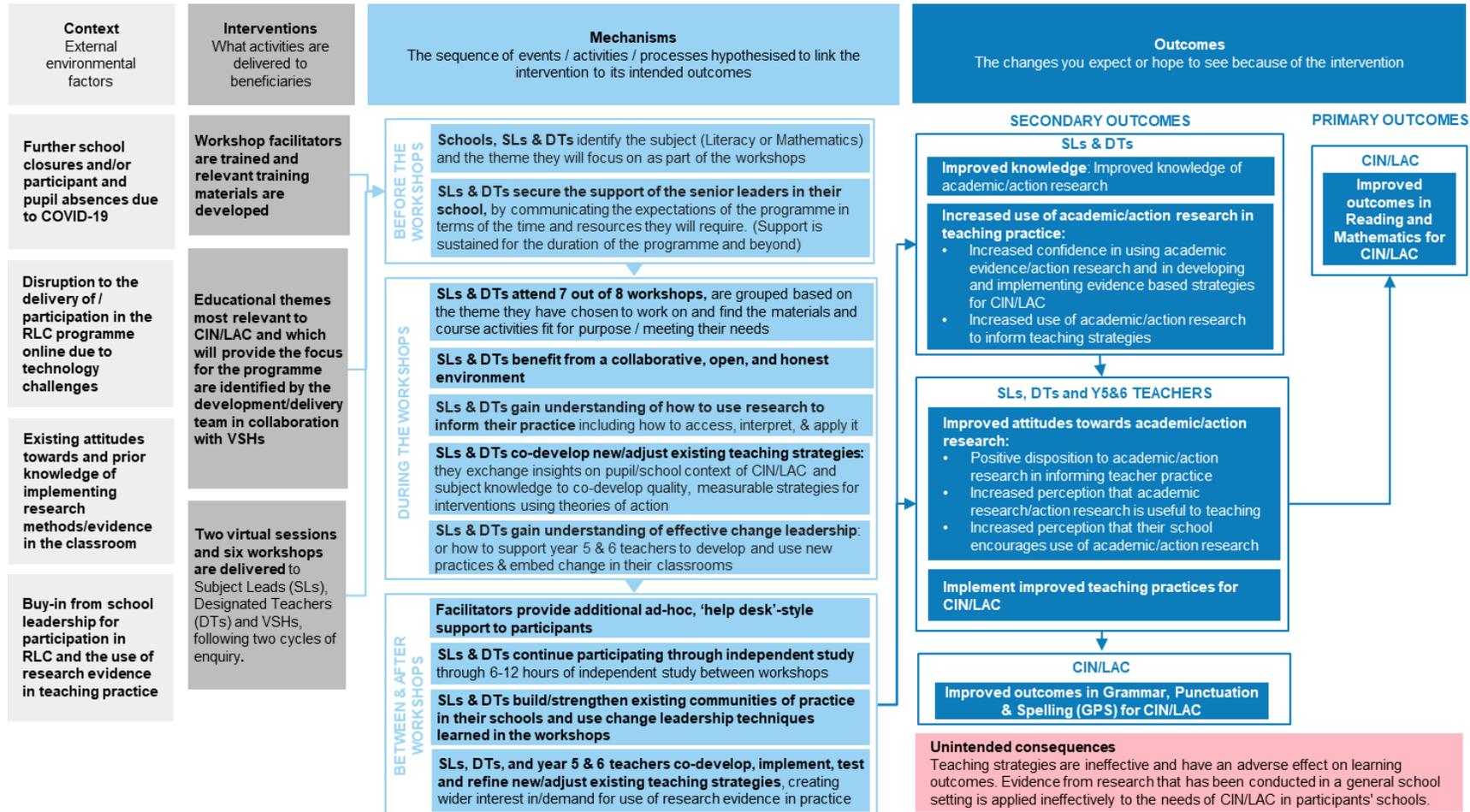
RLC involves six workshops during which Subject Leads and Designated Teachers engage with the programme's materials and planned activities. Before and after the workshops, teachers are to also attend an introductory session where they are introduced to the programme and a 'moving forward'/wrap-up session in which they reflect on their learning and consider next steps. RLC is to run between November 2021 and May 2022.

### Where (location)

Workshops will be hosted online, with each lasting for approximately two and a half hours. Workshops are to be held after the end of the school day, thus after about 3:30pm, to minimise disruption for teachers and pupils.

# Draft Logic Model

Figure 2: RLC Logic Model



## Interventions

The activities expected to take place as part of the intervention involve:

- **Intervention development: Three facilitators are trained** by the development/delivery team (the School of Education, Durham University) and **intervention materials are developed**, including easy-to-read, practical syntheses of academic research and templates for teachers to develop interventions using a Theory of Action, drawing on materials from previous RLC programmes and prior research.
- **Educational themes most relevant to CIN/LAC and which will provide the focus for the intervention are identified, by the development/delivery team in collaboration with VSHs.** The delivery team will facilitate a series of meetings with VSHs to identify themes considered most pressing for CIN/LAC and their learning (for example, meta-cognition or confidence). These themes will then be included in programme consent forms, where teachers will be asked to rank them in order of preference, in order for the delivery team to better understand the needs of participants and prioritise themes to be covered in the workshop. The shortlisted themes will provide a ‘menu’ of options from which Subject Leads and Designated Teachers will choose to focus on as part of the workshops and develop relevant teaching strategies for as part of the programme.
- **Two virtual sessions and six workshops are delivered** to Subject Leads, Designated Teachers and VSHs, following two cycles of enquiry. The first cycle of inquiry takes places between workshop 1 and 3, and the same process is repeated during workshops 4 to 6. The table below provides more detail on the sessions/workshops. Each workshop group will consist of 10-15 participants.

*Table 1: RLC sessions and workshops*

Session / workshop titles	Description of sessions/workshops
Introduction session	Participants, <ul style="list-style-type: none"> <li>● are introduced to the purpose and workings of the RLC programme</li> <li>● gain an understanding of their role and what is expected of them</li> <li>● are informed on how their school’s senior leaders, e.g., the Head Teacher and Assistant Head Teacher, need to support them and year 5 and 6 teachers in order for them to be successful in the programme</li> </ul>
Workshop 1: Developing new research informed teaching approaches	Participants, <ul style="list-style-type: none"> <li>● examine and reflect on current teaching practices for CIN/LAC in their school</li> <li>● define their vision and related aims and objectives for what is to be achieved in relation to teaching and learning of CIN/LAC in their school</li> </ul>

	<ul style="list-style-type: none"> <li>● assess the gap between current practice and their vision, by discussing what research evidence shows about effective practice in this area and their own practical experiences</li> <li>● derive an initial idea of what strategy could be employed and how</li> </ul>
Workshop 2: Testing and refining new initiatives	<p>Participants,</p> <ul style="list-style-type: none"> <li>● implement the new/adjusted strategy in their school and when in the workshop, review pupil data and other relevant information/evidence to assess its effectiveness</li> <li>● refine their strategy / improve it</li> <li>● may be asked to trial their ideas with other colleagues, using approaches like lesson study</li> <li>● are supported to develop Theories of Action which will provide a documented record of the new/adjustment of existing strategy and assessment approaches for measuring its success</li> </ul>
Workshop 3 + impact: Leading the implementation of new initiatives and change, and how to know whether they made a difference	<p>Participants,</p> <ul style="list-style-type: none"> <li>● discuss the evidence from the trial and lesson studies and whether their strategies need refining</li> <li>● discuss ways of embedding change effectively in their schools and different change leadership strategies</li> </ul>
Workshop 4: Developing second round of research informed teaching approaches	<p>Participants,</p> <ul style="list-style-type: none"> <li>● repeat the processes and procedures in workshops 1 to 3 to create a new /adjust a different strategy used in the school with CIN/LAC</li> <li>● are able to change the theme they will be focusing on as part of round two</li> </ul>
Workshop 5: Other ways to test and refine	<p>Participants,</p> <ul style="list-style-type: none"> <li>● enrich their understanding and repertoire of testing and refining their teaching strategies aimed at CIN/LAC</li> </ul>
Workshop 6: Additional material on leading change	<p>Participants,</p> <ul style="list-style-type: none"> <li>● enrich their understanding and repertoire of strategies for leading change in their school to support year 5 and 6 teachers to implement effective teaching strategies for CIN/LAC</li> </ul>
Moving forward	<p>Participants,</p> <ul style="list-style-type: none"> <li>● reflect upon what has been achieved so far and how</li> <li>● working in self-organising research learning communities, are able to continue implementing the strategies as well as use the Theory of Action process learnt to create and test new strategies for CIN/LAC</li> </ul>

## Mechanisms

### Before the workshops and introductory session

- **Schools, Subject Leads and Designated Teachers identify the subject (Literacy or Mathematics) and the theme (out of the themes previously identified by VSHs) they will focus on as part of the workshops.** As discussed above, both subject and theme will be chosen based on the needs of CIN/LAC in their school. (Teachers may choose to focus on one theme throughout the RLC programme, or switch themes during the second cycle of inquiry.)
- **Support from the schools' senior leaders is secured:** Subject Leads and Designated Teachers secure the support of the senior leaders in their school, by communicating the expectations of the programme in terms of the time and resources they will require. Support is sustained for the duration of the programme and beyond. Ideally, the RLC programme would be tied into teachers' regular work assignments and even performance management targets (e.g. through CPD plans) so that it does not add too much of a burden to teacher workload. In addition, improving research literacy and learning practices among teachers should also be part of school leaders' longer-term strategic plans. Finally, it is important to ensure that RLC is included as part of continuity planning for school leadership, to ensure that changes in school leadership do not derail the success of the programme.

### During the workshops

- **Subject Leads and Designated Teachers attend at least 7 out of 8 workshops/sessions and are grouped based on the theme they have chosen to work on.** For an impact on pupil outcomes to occur, it is assumed that either the Subject Lead or Designated Teacher from each school attend at least 7 out of 8 of the workshops in order to ensure they are part of each key step of the intervention.
- **Subject Leads and Designated Teachers benefit from a collaborative, open, and honest environment:** For the workshops to be effective, Subject Leads and Designated Teachers must be able to collaborate and share learning with each other in an open, honest environment so that they are able to challenge each other and themselves as well as reflect on and question their practice. As such, the RLC programme is intended to create a positive and supportive workshop environment which helps foster reflective and constructive discussions. In the workshops, participants are expected to benefit from sharing the challenges they face and the strategies they develop with participants from other schools. In this way, the RLC may create cross-school repositories of knowledge which participants can tap into, learn from, and/or use.
- **Subject Leads and Designated Teachers gain improved understanding of how to use research to inform their practice:** By consulting research evidence in a synthesised format in the workshop and through links and sources provided by

facilitators, Subject Leads and Designated Teachers are expected to gain an understanding of the practical applications of research evidence to their teaching and to that of their colleagues, and how to access, interpret, and apply it.

- **Subject Leads and Designated Teachers co-develop new/adjust existing teaching strategies:** Subject Leads and Designated Teachers from each of the schools are to work closely together to interpret research evidence and contextualise it. Subject Leads are to bring their specific subject knowledge on Literacy or Mathematics, whilst Designated Teachers their insights on the background and challenges of CIN/LAC in the school. Bringing together subject specialisms with a deep understanding of the CIN/LAC in the school and their needs has the potential to further support personalised learning. New/adjusted existing strategies will be underpinned by a clear Theory of Action which will guide the development process and also support evidence gathering and impact assessment in the classroom.
- **Subject Leads and Designated Teachers gain understanding of effective change leadership.** This is intended to enable the workshop participants to effectively generate interest in and engagement of year 5 and 6 teachers with the new/adjusted existing teaching strategies they are introducing, as well as in the concept of evidence-informed action research as a source of information for developing new teaching practices.

#### **Between and after the workshops**

- **Facilitators provide additional ad-hoc, 'help desk'-style support to participants,** if required, in between the workshops, for example, should a teacher require 1-1 advice on developing and implementing a particular strategy, or understanding a piece of research.
- **Subject Leads and Designated Teachers spend 8-12 hours of independent study** in between workshops reading additional literature to that discussed in the workshops to further inform and refine their strategies.
- **Subject Leads and Designated Teachers build/strengthen existing communities of practice in their schools and use change leadership techniques learned in the workshops.** Initially, it is expected that this could be through staff meetings, emails, or workshops organised by the Subject Leads and Designated Teachers. Efforts to create communities of practice will require effective information sharing, collaboration, and relationship-building driven by workshop participants.
- **Subject Leads, Designated Teachers and year 5 and 6 teachers co-develop, implement, test and refine new/adjust existing teaching strategies for CIN/LAC in their school, creating wider interest in/demand for use of research evidence in practice.** Working collaboratively, workshop participants and their years 5 and 6 colleagues develop evidence-based teaching strategies and relevant classroom material that allow personalised learning for CIN/LAC in their school. Part of implementation also involves the collection of relevant pupil data and reflection upon the implementation of

strategies in action to assess the effectiveness of the strategies and improve them. As positive outcomes start materialising, this process is also expected to help generate interest in and enthusiasm for the new strategies and more generally for the use of evidence in teaching practice among teachers in the school.

## Outcomes

This pilot will attempt to gauge the potential for an indicative impact analysis. It will assess the quality of outcome data which will be required for a large-scale impact study. These outcomes include both pupil and teacher outcomes and their 'readiness for trial'.

### Pupil outcomes

It is expected that the programme will improve pupils' attainment in Reading and Mathematics, as measured by the relevant national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years. In addition, it is expected that there will be an improvement in Grammar, Punctuation, and Spelling (GPS) outcomes, also measured by the relevant national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years.

### Teacher outcomes

It is expected that both workshop participants as well as years 5 and 6 teachers will co-develop and implement improved teaching practices for CIN/LAC. As part of this process, Subject Leads, Designated Teachers and year 5 and 6 teachers will become more confident developing and trialling new practices for CIN/LAC based on evidence and the Theory of Action learned in the workshops. Thus, the RLC programme is designed to help produce a wider change in attitudes and behaviours for years 5 and 6 teachers. It is assumed that the more sustained the application of new/adjustment of existing teaching strategies for CIN/LAC, and of the Theory of Action within teacher communities, the greater the impacts on pupil attainment over time.

Teacher outcomes centre on improvements in workshop participants':

- **Knowledge** of academic/action research specifically relating to CIN/LAC;
- **Attitudes** towards the usefulness of academic/action research to enhance teaching strategies for CIN/LAC; and
- **Behaviours** relating to the use of academic/action research in the development of new teaching strategies, and the implementation of improved teaching practices tailored to the needs of CIN/LAC in their school.

As part of the pilot, measures of pupils and teachers' outcomes will be collected and analysed descriptively. The descriptive analysis developed as part of the pilot will not be interpreted as evidence of impact of RLC but will be useful to assess data quality and the feasibility of using these outcome measures in an RCT setting.

## Research questions

The research questions the pilot aims to address, key indicators, and methods, are broken down in the following table in line with four key areas: **Evidence of feasibility**, **Evidence of promise**, **Readiness for trial** and **Cost**.

Research questions	Indicators	Methods
<b>1. Evidence of feasibility</b>		
<b>Fidelity</b>		
<ul style="list-style-type: none"> <li>• What is teachers' attendance at the RLC workshops?</li> <li>• Is the implementation of the RLC programme perceived as consistent with its original design? If no, are adaptations perceived as beneficial or detrimental?</li> <li>• How relevant / well adapted is the content of the RLC programme perceived as meeting the needs of teaching and learning for CIN/LAC?</li> <li>• How well do Subject Leads and Designated Teachers leverage their leadership and support roles to cascade teaching strategies to other teachers and deliver the RLC programme in their schools?</li> <li>• How well do teachers adapt their teaching practices to incorporate learnings from the programme?</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance rate of Subject Leads and Designated Teachers</li> <li>• Adherence of workshops to workshop agenda and RLC cycle of inquiry</li> <li>• Explanation of the reasons behind key adaptations to the RLC programme focusing on CIN/LAC compared to its previous versions</li> <li>• Perceived feasibility of delivering the role of the Subject Lead and of the Designated Teachers as required by the RLC programme</li> <li>• Perceived benefits and drawbacks of these adaptations</li> </ul>	<ul style="list-style-type: none"> <li>• Session and teacher attendance data collected by the delivery team</li> <li>• Interviews with delivery team</li> <li>• Case studies</li> </ul>
<b>Differentiation and service orientation</b>		

<ul style="list-style-type: none"> <li>● To what extent is the RLC programme perceived as genuinely new and innovative compared with similar initiatives that have been previously / are currently implemented at the school for CIN/LAC?</li> <li>● Does the RLC programme offer support in ways not previously offered?</li> </ul>	<ul style="list-style-type: none"> <li>● Comparison with similar activities previously implemented or ongoing in schools relating to teaching strategies for CIN/LAC</li> <li>● Perceived benefits of the RLC programme compared to previous practices relating to teaching CIN/LAC in the schools</li> </ul>	<ul style="list-style-type: none"> <li>● Pre and post teacher questionnaire</li> <li>● Case studies</li> </ul>
<p><b>Barriers and facilitators to delivery</b></p>		
<ul style="list-style-type: none"> <li>● What are Subject Leads and Designated Teachers' views of the frequency, timing, and duration of the workshops?</li> <li>● What adaptations could be made to the RLC intervention to improve future rollouts?</li> <li>● How did Subject Leads and Designated Teachers view the process of getting buy-in from leadership at their schools?</li> </ul>	<ul style="list-style-type: none"> <li>● Perceived suitability of workshops' frequency, timing, and workshop duration by Subject Leads and Designated Teachers</li> </ul>	<ul style="list-style-type: none"> <li>● Interviews with the delivery team</li> <li>● Pre and post teacher questionnaire</li> <li>● Workshop observations</li> <li>● Case studies</li> </ul>
<p><b>Reach and acceptability</b></p>		
<ul style="list-style-type: none"> <li>● How attractive is the idea of the RLC to teachers and school leaders?</li> <li>● To what extent are teachers able to develop, implement, and target new/adjusted teaching strategies to pupils who had been CIN/LAC at any point in the last six years in their classrooms?</li> <li>● To what extent do Designated Teachers and Subject Leads (participating in the workshops), year 5 and 6 teachers, and teachers in the wider school engage</li> </ul>	<ul style="list-style-type: none"> <li>● Perceived acceptability, relevance, and usefulness of the RLC programme as a whole school approach to improving outcomes for CIN/LAC</li> <li>● Belief that the RLC approaches to developing teaching strategies for CIN/LAC are sustainable beyond the end of the programme</li> <li>● Perceived quality of engagement, participation, and collaboration in the</li> </ul>	<ul style="list-style-type: none"> <li>● Pre and post teacher questionnaire</li> <li>● Case studies</li> </ul>

<p>with the programme and use the resources provided in the workshops?</p>	<p>workshops by Subject Leads and Designated Teachers</p> <ul style="list-style-type: none"> <li>• Year 5 and 6 teachers reached and beyond (if any) and perceptions of the level of use of the resources provided in the RLC workshops</li> <li>• Attendance rates over time</li> </ul>	
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## 2. Evidence of promise

### Mechanisms

<ul style="list-style-type: none"> <li>• How does the RLC and the role of Subject Leads and/or Designated Teachers work in practice? And how does this enactment differ based on different school contexts?</li> <li>• To what extent do Subject Leads and Designated Teachers effectively collaborate with year 5 and 6 teachers to co-develop and implement Theories of Action in their schools?</li> <li>• To what extent do Subject Leads and Designated Teachers effectively collaborate with each other to facilitate programme success? (e.g. in exchanging relevant subject matter expertise, in change leadership / supporting other year 5 and 6 teachers)</li> <li>• What are the views of Subject Leads and Designated Teachers on the quality of workshop content, structure, support, and environment (or the space created for collaboration and open and honest conversations)?</li> </ul>	<ul style="list-style-type: none"> <li>• Proportion of Subject Leads and Designated Teachers who develop Theories of Action as per the RLC workshop guidance materials</li> <li>• Description of approaches to co-developing and implementing relevant academic literature and the Theory of Action cycle by Subject Leads, Designated Teachers, and year 5 and 6 teachers</li> <li>• Perceived barriers and enablers to the programme and schools' implementation, and to achieving better Reading and Mathematics outcomes for CIN/LAC</li> <li>• Perceived benefits of the programme on CIN/LAC Reading and Mathematics outcomes compared to other pupil groups that need more tailored support</li> <li>• Perceived quality and relevance of workshop content and activities, facilitation, and facilitator support as well as of collaboration and participation among participants</li> </ul>	<ul style="list-style-type: none"> <li>• Pre and post teacher questionnaire</li> <li>• Workshop observations</li> <li>• Case studies</li> </ul>
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<ul style="list-style-type: none"> <li>• Do different stakeholders believe that the programme is addressing their requirements and the outcomes needed to be achieved?</li> <li>• What supports and what inhibits effective implementation at a school level and why?</li> <li>• What are the necessary pre-requisites for the use of research to change teachers' practice and how are they manifested at a school level?</li> <li>• What are the characteristics and practices employed by schools where the RLC programme and the role of Subject Leads and/or Designated Teachers is perceived to be effective?</li> </ul>	<ul style="list-style-type: none"> <li>• Suggested improvements for the RLC programme and school level implementation based on context and circumstances reported by Subject Leads, Designated Teachers, and year 5 and 6 teachers</li> <li>• Differences in practices and perceived outcomes across schools</li> <li>• Perceived significance of the RLC approach and of the new/adapted strategies for CIN/LAC compared to previous approaches/strategies</li> <li>• Understanding of factors influencing dosage, including support of school leadership; time and resources/costs to participation; hours of independent study</li> <li>• Contextual, environmental, and external factors that influence decisions on the approach, processes, and outcomes</li> </ul>	
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### Potential impacts

<ul style="list-style-type: none"> <li>• How do teachers expect the RLC programme to impact on both their practices and school practices and on CIN/LAC outcomes?</li> <li>• Do there appear to be any unintended consequences or negative effects for teachers, pupils, or both?</li> <li>• What evidence of promise is there that the intervention positively impacts teacher outcomes?</li> <li>• What evidence of promise is there that the intervention positively impacts pupil attainment?</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived expectations and concerns regarding the RLC approach</li> <li>• Exploration of new teaching strategies implemented and their effectiveness, including enablers and barriers to what appears to 'work'</li> <li>• Discussion of wider changes in school culture/community (if any)</li> <li>• Change in Subject Leads and Designated Teachers' knowledge and use of</li> </ul>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Pre and post teacher questionnaire</li> <li>• KS2 Scaled Score in Reading and Mathematics and GPS</li> </ul>
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<ul style="list-style-type: none"> <li>To what extent are the topics chosen in the workshop transferrable to improvements in attainment across different subject areas?</li> </ul>	<p>academic/action research in practice; and in all participants' attitudes towards academic/action research</p> <ul style="list-style-type: none"> <li>Improvement in KS2 attainment scores in Reading and Mathematics</li> </ul>	
<b>3. Readiness for trial</b>		
<ul style="list-style-type: none"> <li>Do the teacher questionnaires achieve the desired response rate?</li> <li>How feasible is the use of the outcome measures developed and adapted from the NfER teacher questionnaire for assessing teacher outcomes (using correlated Rasch logit measures based on a multidimensional partial credit model)? What changes may be needed to the survey tool?</li> <li>How feasible is the use of national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years for measuring pupil outcomes? What issues with data access or quality may need to be mitigated?</li> <li>What is the appropriateness of Rasch model scoring for analysis of outcome data?</li> </ul>	<ul style="list-style-type: none"> <li>Response rate to teacher questionnaire</li> <li>Perceived challenges to capturing data based on logic model outcome measures and amended NfER questionnaire tool</li> <li>Perceived challenges to accessing NPD data and data quality <ul style="list-style-type: none"> <li>Success of extraction of target pupils from NPD data</li> <li>Completion of baseline and outcome data in terms of missing fields in NPD for target pupils</li> </ul> </li> <li>The extent to which the item measures meet the requirements for Rasch scoring</li> </ul>	<ul style="list-style-type: none"> <li>Pre and post teacher questionnaire</li> <li>NPD data on KS2 Scaled Score in Reading, Mathematics, and GSP</li> </ul>
<b>4. Costs</b>		
<ul style="list-style-type: none"> <li>What are the largest items of cost for the delivery of the RLC Programme?</li> <li>What is the cost per school of delivering the intervention?</li> <li>What is the cost per pupil of delivering the intervention?</li> </ul>	<ul style="list-style-type: none"> <li>Staff costs for implementation</li> <li>Staff costs during RLC workshops and sessions, including costs of teacher cover and transportation</li> <li>Recruitment and preparation costs</li> <li>Facilities, equipment, and materials</li> </ul>	<ul style="list-style-type: none"> <li>Data will be collected using a proforma filled in by the Durham delivery team with additional information collected from schools as part of the post-questionnaire to Subject Leaders and/or Designated Teachers</li> </ul>

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| <ul style="list-style-type: none"><li>• What could be the cost implications of scaling up the intervention?</li></ul> |  |  |
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## Methods

### Sample selection and recruitment

The first unit of recruitment will be the virtual school. Virtual schools are responsible for identifying and recruiting eligible primary schools within their LA to take part in the programme and the evaluation. To be eligible, primary schools need to currently have enrolled a CIN/LAC in year 6, under the categories included as per the definition of CIN/LAC included in the Intervention section, at any point during the last 6 years (2015 – 2021). The WWCS and the Durham University delivery team have also advertised the programme to schools online and through professional networks.

To date, six schools have been recruited, but no details are available on the number of eligible pupils within schools. Assuming three eligible pupils in each school, there will be 18 CIN/ LAC expected to be recruited to participate in the pilot.

For teacher outcomes, we estimate that there will be around four full time teachers (including school leaders) per school participating in the pilot, which gives an approximate total of 24 teachers involved.

### Data Collection

Both quantitative and qualitative data will be collected for the evaluation of the pilot.

#### **Pre and post teacher questionnaire**

To assess teacher outcomes, we will circulate baseline and endline questionnaires to Subject Leads, Designated Teachers and years 5 and 6 teachers at the start of the intervention, prior to the first 'Introductory' session, and at the end of the intervention, after the final 'Moving Forward' session. Questionnaires will be developed and administered online and disseminated using teacher email addresses provided by Head Teachers in consent forms administered as part of the recruitment process.

We will use and adapt a questionnaire developed by the National Foundation for Educational Research (NFER) which was used in the previous RCT of the RLC programme (Nelson et al., 2017) and uses 13 questions to assess the following teachers' outcomes:

- Positive disposition to academic research in informing teacher practice
- Use of academic research to inform selection of teaching approaches
- Increased perception that academic research is useful to teaching
- Increased perception that own school encourages use of academic research
- Active engagement with online evidence platforms
- Improved research knowledge

The teacher questionnaire will also contain questions about the implementation of the programme. These will be guided by the research questions outlined previously.

Finally, the teacher questionnaires will be used to collect additional information on teachers which will inform both the descriptive analysis and the assessment of the potential for future impact evaluation. These variables are:

- Teacher status (classroom teacher, middle leader (such as head of department, subject, or curriculum subject area leader); senior leader (deputy or assistant headteacher); headteacher, principal or director; SEN teacher; supply, cover or Planning, Preparation and Assessment (PPA) teacher; high level teaching assistant)
- Teaching experience
- Years teaching in the school
- Whether the respondent holds a postgraduate qualification.

If deemed appropriate, in a future impact evaluation, the above variables can be used as control variables in exploratory extensions of the impact evaluation models, to be able to compare teachers with similar characteristics.

### **Administrative data on pupil outcomes**

Pupils participating in the pilot will be linked to the National Pupil Database (NPD) data through their Unique Pupil Number (UPN) and school ID provided by the Department for Education (DfE) in the form of de-identified individual level pupil data. The pilot will provide the opportunity to test the feasibility of and potential problems with the data linkage.

The following individual-level variables on pupil educational outcomes at KS2 will be collected from NPD. They will be measured from May 2022 for CIN/LAC in year 6 and at the start of the evaluation:

- KS2\_READSCORE: Scaled reading score in reading, ranging from 80 to 120
- KS2\_MATSCORE: Scaled reading score in mathematics, ranging from 80 to 120
- KS2\_GPSSCORE: A synthetic measure of KS2 Grammar, Punctuation, and Spelling attainment.

Reading and Mathematics scores for KS1 will also be collected. The GPS score at KS1 is not available in the NPD. The availability of KS1 data and its quality is important for a future impact evaluation, as these can be used in impact evaluation models as baseline measures to control for the portion of the observed outcome that can be attributed to correlations with past outcome values rather than the intervention.

### **School-level data**

The following school-level variables will be collected either directly from the schools or from publicly available data (the School Census):

- Percentage of pupils by age category
- Percentage of male and female pupils
- Percentage of pupils by ethnicity
- Percentage of pupils with English as a first language
- Percentage of pupils with Special Education Needs

- Percentage of pupils eligible for Free School Meals in the current year.

The above school-level characteristics will be used to profile the schools participating in the pilot. The availability and quality of this data will be assessed to understand the feasibility of a future impact evaluation, as these variables can be used as control variables in exploratory extensions of the impact evaluation models.

### **Workshop observations**

Workshop observations of RLC sessions will be conducted to ensure key research questions are answered relating to engagement/participation in and quality of the workshop sessions and to triangulate results from the teacher questionnaire and case study interviews. A semi-structured observation guide will be used to ensure data collection is consistent and all relevant data is collected.

### **Case studies**

Case studies will be conducted on all six participating schools. These will consist of a series of telephone or virtual semi-structured interviews with Head Teachers, Subject Leads, Designated Teachers, and year 5 and 6 teachers in the spring term of the academic year 2021/22. The content of interviews will be guided by the evaluation framework and tailored depending on the interviewee. With participants' consent, the case studies will also draw on the Theories of Action developed by each Subject Lead-Designated Teacher pairing in the RLC workshops and other materials developed for the development or cascading of new/adjusted teaching strategies.

### **Interviews with delivery team and VSHs**

Interviews will also be conducted with the Durham University delivery team and VSHs to reflect on the effectiveness of the RLC programme workshops, key achievements and barriers to success, unintended or unexpected outcomes, and lessons learned.

In summary, pilot data will be captured through:

<b>Data Collection Method</b>	<b>Sample Size</b>	<b>Collection Timeline</b>
<b>Teacher survey</b>	24 teachers (estimated)	Baseline: Oct – Nov '21 Endline: Apr – May '22
<b>Administrative data (NPD)</b>	18 pupils (estimated)	Aug '22 – Feb '23
<b>School level data</b>	6 schools	Aug '22 – Feb '23
<b>Workshop observations</b>	8 workshops/sessions	Oct '21 – May '22

<b>Case studies</b>	6 schools, incl. up to 30 interviews total with Subject Leads, Designated Teachers, 2-3 year 5 and 6 teachers, and Head Teachers in each school, and document/evidence review of classroom strategies implemented	Mar '21 – May '22
<b>Interviews with Virtual School Heads (VSHs)</b>	Up to 3 VSHs participating in the RLC workshops	May '22
<b>Interviews with delivery team</b>	3 delivery personnel (incl. Durham University Programme Director and facilitators)	May '22

## Analysis

The analysis of the quantitative and qualitative information collected in the pilot will aim to assess the quality of the data collected (e.g., in terms of response rates, missing values and sample sizes) and the feasibility of constructing the necessary outcome measures. This will inform the feasibility of a future impact evaluation. Combined with the assessment of the quality of cost data, it will also inform the feasibility of a cost-benefit analysis.

### Construction of teacher outcome measures

We propose to use different models for the construction of teacher knowledge and the teacher attitudes outcome measures.

In the **knowledge** part of the questionnaire, teacher responses to question items are scored as correct or incorrect. We will use standard psychometric techniques to compute a knowledge measure for each of the participants, both at baseline and at end point. The simple Rasch model (Lamprianou, 2019, chapter 3) is appropriate for dichotomously scored items.

The analysis will use open-source packages in R and will be fully replicable; and the code can be provided to the client upon request. For the Rasch analysis, the usual dimensionality and robustness checks will be conducted (see Lamprianou, 2019; chapter 3 'Expectations and Residuals').

As for teachers' **attitudes outcome measures**, we will rely on the results in Nelson et al. (2017) and assume five dimensions for the attitude outcomes.

### Descriptive analysis

For numeric variables, for both the pupil and the teacher samples, descriptive statistics (means, standard deviations, and quartiles) and accompanying visual aids (boxplots and histograms) will be used to present the data to the reader.

Descriptive statistics will be presented for pupil and teacher outcome variables, for baseline outcome measures (where available) and for additional school-level and teacher-level variables collected as part of the pilot. We will also compare baseline and post-intervention outcome measures, to capture any changes in the outcomes of interest, although these results will not be interpreted in causal terms.

For a potential implementation of an RCT after the pilot, it is important to assess the degree of compliance with the intervention. In the pilot we can only assess non-compliance of teachers or schools assigned to the intervention.<sup>5</sup>

We will report descriptive measures of teacher compliance and partial compliance, e.g.:

- Number of teachers (Designated Teacher and Subject Lead) attend all workshops
- Number of teachers who miss one workshop
- Number teachers who miss more than one workshop

We will also differentiate between workshops where both teachers are absent and where only one teacher is absent. This analysis will allow assessing the degree of exposure to the intervention across participating schools.

We also suggest profiling intervention schools and virtual schools by their extent of compliance, comparing descriptively some of their main background and performance data, and if in doubt, undertaking qualitative investigation to find out why they did not comply.

As part of the exploratory analysis, we will check whether the school's subject choice is related to past performance, based on administrative data collected from the schools. We will compare descriptive statistics (means and standard deviations) on Literacy and Mathematics for schools which chose to focus on either of the subjects.

### **Analysis of missing data**

Missing data can reduce statistical power through reducing sample size and introduce bias into the impact estimator if data loss is not independent of treatment assignment. Our principal concern is with missing outcome data as this will make the most difference to our ability to accurately estimate the impact.

Analysis of pupil outcomes is undertaken on NPD administrative outcomes, which, in theory, should be complete. Teacher outcomes are based on self-reported questionnaire data and there is a greater potential for incomplete data both at unit (teacher) and (questionnaire) item level.

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<sup>5</sup> The other side of non-compliance, e.g., non-intervention teachers taking the training, could be assessed only if a control group of school was available. In reality, however, we would not expect this type of non-compliance to occur in this intervention.

We will assess and report on the prevalence of missing teacher / pupil outcome data and additional data (baseline and covariate measures). The extent and location of missing data will inform approaches to deal with missing data in a future impact evaluation.

### **Analysis of Harms**

In order to analyse the possibility of adverse effects resulting from the RLC programme, we will be guided by Lorenc and Oliver's (2014) taxonomy of harms which identifies five types of potential harms:

- Direct
- Psychological
- Equity
- Group and social
- Opportunity cost.

It is not expected that the intervention will result in any of the above harms to beneficiaries or wider stakeholders (unintended consequences of the intervention, including harms, will be explored in the case studies).

### **Workshop observations**

Workshop observations will be triangulated alongside the findings from the teacher questionnaires and the case study interviews. Data will be coded and analysed thematically, looking at specific context, mechanism, and outcome relationships as outlined in the programme's Logic Model.

### **Case studies and interviews**

All interviews will be transcribed. Thematic analysis will be conducted using NVivo11 for data management and coding. The thematic coding framework will be developed both deductively based on the Logic Model and research questions, and inductively, including unexpected issues emerging in the data. Setting up the coding framework in NVivo11 will facilitate quality control and ensure that the analysis is comprehensive, rigorous, and underpinned by a consistent approach.

The analysis will develop a detailed understanding of each individual case, which will be followed by an analysis of key themes in the findings across cases. The analysis will include descriptive accounts of what has occurred in each case as well as explanatory accounts about what works, for whom, in what circumstances, and why.

### **Cost Evaluation**

The cost analysis will be based on the principles set out in the 'Cost evaluation guidance for EEF evaluations' (Education Endowment Foundation, 2019) and thus, the "ingredients method" (Levin, et al., 2018). This method is essentially a bottom-up approach, which allows accounting for the costs of all resources necessary to implement the RLC programme regardless of who incurs the costs.

The ingredient method is linked to the Logic Model, which describes the resources that LAs and schools need to implement the programme, while the cost analysis finds the monetary value of these resources.

The stakeholders on whom the costs of the RLC programme may fall are:

- LAs (virtual schools)
- Schools
- Delivery partners

The cost analysis will only report costs that are additional to the 'Business as Usual' costs. In other words, the cost analysis will compare the costs of the RLC to the costs of any existing programme or activity already carried out from the point of view of the stakeholders bearing the costs. In some cases, all programme costs will be additional, i.e., if there was no previous programme at the school level, all the school costs would be considered additional.

The analysis will distinguish between:

- **Pre-requisites costs**, including all resources (e.g., equipment, staff) required for the implementation of the programme, but that the actors bearing the costs already have. For instance, the training may be delivered through computer or online equipment, which the school already have. These will not be considered additional costs (unless schools bought these on purpose) but will be reported separately for information. Similarly, delivery partners might have already the necessary equipment in place to develop the training material (e.g., existing templates, printers, etc...)
- **Start-up costs**: they include the necessary resources to start the implementation of a programme each year. For instance, the cost of developing the training material would be a start-up cost which will not be incurred again (at least not in the same amount) once the programme is scaled-up.
- **Recurring costs**: refers to the resources needed each year to implement the programme. These are important elements to consider for a future scale-up of the programme.

The following cost categories will be included in the analysis (other categories might emerge during the case study evaluation):

- **Staff costs for the implementation of the programme**, including salaries of the RLC facilitators, if possible, broken down by seniority of the staff involved.
- **Staff costs during RLC workshops and sessions**, including costs of teacher cover for the hours the teachers spend in the workshops, as well as any cost to attend the workshops (e.g., transportation costs)
- **Costs of recruiting schools and preparation costs for the programme.**
- **Facilities, equipment, and materials**, including any costs for printing training material (which may be incurred by the delivery partners or the schools), provision of venue (if the training is outside the school premises) or other technical equipment. We expect these to be low for the RLC as many schools will already have facilities

and spaces where to conduct the training, hence the RLC training will not create large additional costs.

- **Other costs** (residual category) that might emerge from programme implementation.

By comparing the size of the different cost types, we will draw out considerations as to whether potential cost reductions can be achieved when scaling up the programme.

Data will be collected using a proforma filled in by the Durham delivery team with additional information collected from schools as part of the post-questionnaire to Subject Leaders and/or Designated Teachers.

In some cases, assumptions will be necessary to estimate costs. A typical example are the costs of equipment, which may be used both for the programme, and other (including business as usual) activities. Splitting the costs to attribute to the programme may be challenging and requires assumptions formulated based on discussions with stakeholders.

The primary output of the cost analysis will be the total cost of the programme per CIN/LAC per school. This will be obtained by dividing the total costs of the programme by the total number of participating schools and then by the total number of CIN/LAC in year 6 in the participating schools.

A sensitivity analysis will aim to explore the variability of costs incurred by the main actors, e.g., virtual schools and schools.

Conditional on availability of sufficient sample sizes and variation in the data, we envisage carrying out the following sensitivity analyses:

- Reporting, for each item of costs, mean, median, standard deviation, minimum and maximum, to have a sense of the dispersion of costs across schools.
- Breakdown of the costs by school size (number of pupils).
- Breakdown of the costs by size of the target population in the schools.

The sensitivity analysis will also test (if needed) the implication of any assumptions made for the estimation of the costs. This will be done by recomputing total costs-per-pupil per school change changing under different assumptions on the costs.

## **Ethics**

### **Process for obtaining ethical approval**

We obtained research ethics approval through Ipsos MORI's research ethics process in September 2021. This process included completing an ethics review form with detailed information on the project as well as submitting relevant information sheets and consent forms for review. The ethics reviewers were independent and not otherwise involved in any evaluation activities. The evaluation team submitted the relevant materials to the Ipsos Ethics Group on Monday 23rd August, 2021, and received feedback from the reviewers which has been reflected in this section. If any changes occur to the intervention delivery or

evaluation, the Principal Investigator will make these known to the chair of the Ipsos MORI Public Affairs Research Ethics Group.

In conversation with Durham University and the What Works for Children's Social Care, we have considered ethical risks and trade-offs of conducting a pilot study for a future experimental evaluation and are satisfied that these are reasonable. We also believe that the evaluation has merit in providing evidence on the effectiveness of the RLC programme for improving learning outcomes for CIN/ LAC.

## Consent

### **Participating in the evaluation**

We have sought consent for participation in the evaluation from schools via their school leadership. To do so, the WWCSO provided virtual schools with information packs to distribute to schools and Head Teachers in their local authority. These information packs included details on the nature of the intervention as well as the evaluation. Schools were also invited to two webinars (hosted jointly by the WWCSO, Durham University, and the Ipsos MORI evaluation team) where we explained the purpose and nature of the evaluation and invited teachers to ask questions to ensure that they were fully informed.

After schools confirmed their interest in participating in the programme, the WWCSO disseminated a consent form requiring sign off by Head Teachers, which detailed the terms and conditions of participation in the RLC programme and evaluation, including their agreement to participate in the evaluation following their allocation to the intervention or control group for a randomised control study, which, due to low recruitment, has since been amended to a theory-based pilot approach.

### **National Pupil Database administrative data on year 6 CIN/LAC**

KS2 attainment data will be collected on the basis of legitimate interests. Since it is collected as part of schools' regular reporting obligations and will not include any personally identifiable information on CIN/LAC, consent from parents, guardians, or carers will not be required. Data collection will be minimised to ensure that no personally identifiable information is collected or can be linked back to individual pupils.

### **Questionnaires, interviews, and workshop observations**

We will seek consent for participation in the teacher questionnaires, interviews, and workshop observations from each participating individual. For the questionnaires, we will include a consent form for teachers to provide their consent to participate at the start of the survey questionnaire. For the interviews, interviewers will check and record whether interviewees consent before starting each interview. For the workshop observations, observers will check and record whether participants consent to the observations at the start of the first RLC introductory session.

Teachers will be informed about the nature of the evaluation and their role in it via their schools through the information packs (which will be disseminated prior to the distribution of the questionnaire or the first workshop). This will include an electronic copy of our information sheet and consent form to Head Teachers. The information sheet will include details on the evaluation, the data that will be collected, how it will be collected, stored, and secured, and how they can withdraw their consent if they choose not to participate. It will clearly state that teachers' participation is voluntary and that they do not have to complete the questionnaire or participate in case studies if they do not want to. At the start of each interview and during the first RLC introductory session, participants will be informed again about the nature of the research that their participation is voluntary.

### Ethical considerations relating to the interviews

In terms of content, the interviews will not ask teachers to discuss personal details of CIN/LAC or any potentially sensitive information and will instead focus on the experience of participating in the RLC, collaborating with other teachers, applying new teaching strategies, and related changes in pupils' behaviour. These expectations will be clearly explained to the interviewee before the interview takes place.

Despite our focus on the RLC intervention (not personal histories) some teachers may be prompted to reflect on things that have happened with CIN/LAC in their pasts. Asking about new teaching strategies to engage CIN/LAC in a research interview may make teachers recall traumatic events experienced by CIN/LAC. We will develop plans for what to do if an interviewee becomes upset. We will go through this plan with moderators in a briefing session before we start the fieldwork and include it as a separate guidance sheet along with the topic guides. We will include techniques for supporting participants who become upset, such as:

- Making sure moderators are aware of any topics that could potentially be upsetting;
- Alternating between "light" and "heavy" topics in the discussion guide, or having a light topic fully immediately after a heavy topic;
- Giving participants enough space to talk about something difficult/upsetting, but knowing when to sensitively move the conversation on; and
- Making sure to end the interview on a positive note if possible.

During interviews we will be flexible, use open questions, and take a friendly and encouraging approach. We will be willing to take breaks and explore topics of interest to the teacher rather than being bound by the topic guide. To build rapport, we will use questions to check understanding; combining verbal and non-verbal communication to facilitate understanding; and allow plenty of time and tailored support for teachers to decide about participation or answering individual questions.

Researchers will make it clear to teachers, both in writing and verbally, that whilst the information they give is confidential, researchers will be legally bound to report anything that suggests children or someone else is at risk of serious harm.

## Data Protection

We will ensure compliance with all data protection regulations (GDPR) and Ipsos MORI's strict information security policy. A Data Privacy Impact Assessment will be conducted as the study will be collecting information from administrative sources about CIN/LAC special categories of data, which is considered sensitive.

Data protection considerations differ for teachers and year 6 CIN/LAC. For the teacher sample, Ipsos MORI will not provide any identifiable information to WWCS or virtual schools from teachers and will thus act as data controller. For year 6 CIN/LAC data, provided by the DfE through the NPD, Ipsos MORI will act as data processor.

For the teacher questionnaire and interviews, we rely on the legal basis of consent. For the administrative data request, we rely on the legal basis of legitimate interests. The additional condition for processing the special category data on ethnic group is Article 9(j) of the DPA 2018 (Archiving, research and statistics). We are aware that such processing is subject to appropriate safeguards. We plan a number of steps to ensure data minimisation and will conduct a Data Privacy Impact Assessment. We consider the administrative data to be pseudonymised. The data will be transferred to WWCS's data archive on completion of the project.

All Ipsos MORI's research operations are governed by the Market Research Society Code of Conduct. We also hold the following international quality standards covering quality management systems, interviewer quality and information security: ISO 20252:2006, ISO 9001:2008 and ISO 27001:2005.

## Data security

Our data security processes meet the standards outlined in the Data Protection Act 2018. Ipsos MORI has the Cyber Essentials standard. Any personal data will be held securely on our UK servers, and securely destroyed at the end of the project. Ipsos MORI uses a purpose-built and dedicated file services solution hosted by Rackspace UK, located in Berkshire. This is accessed and controlled by Ipsos employees only. Rackspace UK are a highly regarded industry leader and carry a full set of ISO certifications. The environmentally friendly data centre ensures enhanced levels of power and cooling and physical security on a 24x7x365 basis.

Any enhanced sample data will be encrypted and sent over our secure file transfer system, Ipsos Transfer. All projects that involve personal data processing are required to complete a data flow and post a privacy policy online for respondents, using standardised templates.

## Ipsos MORI

# Privacy Notice for the “Research Learning Communities” Evaluation

## 1. Introduction

Ipsos MORI and its affiliates, subsidiaries and related entities (“Ipsos”, “we”, “our”) is committed to protecting the privacy and security of the personal data we collect about end customers and users of our services (“you/your”). This project is funded by What Works for Children’s Social Care (“WWCSC”). The project will incorporate evaluating information captured in workshops which are delivered by Durham University

The purpose of this privacy notice is to explain what personal data we collect about you when we conduct research for the Research Learning Communities evaluation project. When we do this, we are the data controller.

Please read this privacy notice carefully as it provides important information about how we handle your personal information and your rights. If you have any questions about any aspect of this privacy notice you can contact us using the information provided below or by emailing us at [compliance@ipsos.com](mailto:compliance@ipsos.com) quoting *Research Learning Communities* in the subject or body of the email.

## 2. Personal data we collect

- Your name
- Your email address
- Your place of work
- Your occupation and level
- Subject specialism
- Length of service
- Highest level of qualification
- Recontact permission where consent is provided

## 3. How we collect information about you

- Basic contact information (name, occupation, email address and place of work) will be collected voluntarily from yourself via a consent form sent to you by your employer or by WWCSC.
- WWCSC will pass the basic contact information to Ipsos.
- From yourself within an online/telephone interview with Ipsos MORI
- From yourself via an online survey Ipsos MORI have sent you.

## 4. Purposes for which we use personal data and the legal basis

When conducting the research study, we may use your personal data for the following purposes and on the following lawful bases. The table below is relevant to all data subjects involved in the research study:

4.1 Purpose	4.2 Lawful Basis for Processing
To conduct the research based on the data you have provided.	Based on consent you have provided in the consent form
For us to contact you to participate in an interview as part of the evaluation where you have clearly indicated to us that you wish to be a participant in this research.	Based on consent you have provided in the consent form  The lawful basis we shall be relying on is consent.
To transcribe the audio captured from any recorded interviews we have with you.	Based on consent you have provided at the start of the interview  The lawful basis we shall be relying on is consent.
For us to send you surveys as part of the evaluation where you have clearly indicated to us that you wish to be a participant in this research.	Based on consent you have provided in the consent form  The lawful basis we shall be relying on is consent.
To be able to check the eligibility to take part in the study based upon the research criteria requirements.	Based on consent you have provided in the consent form  The lawful basis we shall be relying on is consent.
For Durham University to be able to invite you to participate in the workshops.	Based on consent you have provided in the consent form  The lawful basis we shall be relying on is consent.

## **5. Sharing your data**

We will not share your data outside the United Kingdom.

Any data shared with the below categories of recipients is the minimum necessary for the task they have been instructed to carry out on our behalf or in conjunction with us. Each category of recipient is subject to pre-approved review to ensure comparative technical and organisational measure for keeping the data secure.

- TakeNote, pre-approved transcription supplier.

There may be scenarios where we are subject to a legal obligation to disclose or share your personal data, such as with law enforcement agencies, regulatory bodies or public authorities in order to prevent or detect crime. We will only ever disclose your personal data to these third parties to the extent we are required to do so by law.

## **6. How long we keep your data**

Ipsos MORI will only retain your data in a way that can identify you for as long as is necessary to support the research project and findings. In practice, this means that once we have satisfactorily reported the research findings (which does not contain any information that could be used to identify you) to the project funder (WWCSC), we will securely remove your personal, identifying data from our systems by May 2023.

Any teacher contact data WWCSC has provided to Ipsos MORI will be deleted by Ipsos MORI by September 2022. WWCSC will delete any teacher contact data it holds within 3 months of the workshop session coming to an end.

## **7. How we protect your data**

All participants are free to withdraw from the study prior to analysis taking place. If you wish to withdraw from the study please use the details found in section 10 to make contact with Ipsos MORI.

Ipsos MORI takes its information security responsibilities seriously and applies various precautions to ensure your information is protected from loss, theft or misuse. Security precautions include appropriate physical security of offices and controlled and limited access to computer systems.

Ipsos MORI has regular internal and external audits of its information security controls and working practices and is accredited to the International Standard for Information Security, ISO 27001.

Contact information will be shared via secure encrypted transfer by WWCSC with Ipsos MORI and Durham University. WWCSC stores your information securely on a dedicated drive, and access is controlled by WWCSC's secure access policy for the duration of the research study period.

Any personal data is not subject to any automated decision-making.

## 8. Your rights and options

You have the following rights in respect of your personal data:

- You have the right to access your personal data within the limited period that Ipsos MORI holds it.
- You also have the right to rectify any incorrect or out-of-date personal data about you which we may hold.
- Participating in this study is entirely voluntary and is done with your consent. You have the right to withdraw your consent.
- You can ask us to restrict the use of your personal data if: It is not accurate, It has been used unlawfully but you do not want us to delete it, We do not need it anymore, but you want us to keep it for use in legal claims, or if you have already asked us to stop using your data but you are waiting to receive confirmation from us as to whether we can comply with your request.
- In some circumstances you can compel us to erase your personal data and request a machine-readable copy of your personal data to transfer to another service provider. You have the right not to be subject to a decision based solely on automated processing (including profiling) that produces legal effects concerning you or similarly significantly affects you.
- You will not have to pay a fee to access your personal data (or to exercise any of the other rights). However, we may charge a reasonable fee if your request for access is clearly unfounded or excessive. Alternatively, we may refuse to comply with the request in such circumstances.

## 9. How to Complain

You can also lodge a complaint with the Information Commissioner's Office. They can be contacted using the information provided at:

Information Commissioner's Office  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF

Helpline number: 0303 123 1113

ICO website: <https://ico.org.uk/concerns/>.

## 10. Contact us

If you have any questions, or wish to exercise any of your rights, then you can contact:

Contact Name: Nadia Badaoui  
Project: Research Learning Communities (RLC)  
Organisation: Ipsos MORI

Address: 3 Thomas More Square, London E1W 1YW, United Kingdom

Alternatively, you can email us at [RLCevaluation@Ipsos-MORI.com](mailto:RLCevaluation@Ipsos-MORI.com)

## 11. Changes to this privacy notice

We may update this notice (and any supplemental privacy notice), from time to time as shown below. We will notify you of the changes where required by applicable law to do so.

Last modified: 6th January 2022.

## 10. Contact us

If you have any questions, or wish to exercise any of your rights, then you can contact:

Contact Name: Nadia Badaoui

Project: Research Learning Communities (SRI)

Organisation: Ipsos MORI

Address: 3 Thomas More Square, London E1W 1YW, United Kingdom

Alternatively, you can email us at [RLCevaluation@Ipsos-MORI.com](mailto:RLCevaluation@Ipsos-MORI.com)

### Personnel

#### Delivery team

Table 7: RLC delivery team

Name	Organisation	Roles and responsibilities
Chris Brown	Durham University	Programme Director

#### Evaluation team

Table 8: Evaluation team

Name	Organisation	Roles and responsibilities
Karl Ashworth	Ipsos MORI	Principal Investigator
Nadia Badaoui	Ipsos MORI	Project Manager
Stella Capuano	Ipsos MORI	Quantitative Research Delivery
Jaimin Shah	Ipsos MORI	Quantitative Research Support
Emily Mason	Ipsos MORI	Qualitative Research Lead

Adam Behailu

Ipsos MORI

Qualitative Research Support

## Risks

This section outlines the anticipated risks that may arise and steps that will be taken to mitigate against these.

Risk	Mitigation
<p><b>Further school closures and/or participant and pupil absences due to COVID-19 affect teacher/ pupil impact.</b> Teacher and pupil absences in primary schools due to COVID-19 are still part of school life. This could potentially mean that RLC programme participants need to miss sessions/workshops due to illness or extra workload. Pupils that might be part of our sample could be absent at the time when new/adjusted teaching practices are implemented, thus reducing the likelihood of positive impact on their KS2 results. In the same vein, positive impact on outcomes for CIN/LAC could be hindered if school closures are required and blended or online learning replaces classroom teaching and face-to-face interactions between pupils and teachers.</p>	<p>The programme will mitigate against this by ensuring that sessions are recorded and available to any participants who are unable to attend.</p> <p>The evaluation will examine fidelity and dosage of the intervention and potential barriers to participation.</p> <p>In addition, case studies with teachers will include questions on how the new/adjusted teaching strategies were implemented in practice and whether/how closures, blended or online learning affected strategy development and implementation.</p> <p>Likelihood: Medium Impact: Medium</p>
<p><b>Technology challenges disrupt delivery and/or participation in RLC workshops/session.</b> In contrast to previous RLC programmes, the delivery of these RLC sessions and workshops will be held online rather than in person. Online delivery may present potential benefits, including increase in attendance and allowing for recordings of sessions to be shared with absentees or other teachers, as well as reducing time and costs associated with travel. However, it could also present significant challenges to both facilitators and participants, through issues such as poor internet connectivity or audio</p>	<p>The programme will mitigate against this by adapting the workshops and sessions to a virtual setting and using virtual facilitation techniques.</p> <p>The evaluation will examine adaptations that are made to accommodate a virtual setting and their effectiveness (including through workshop observations and interviews with participants and Durham University).</p> <p>Likelihood: Low Impact: Medium</p>

and/or video quality, and thus prevent some participants from participating.	
<b>Programme increases teacher workload (and decreases non-working time), thereby negatively impacting their wellbeing or work in other areas.</b>	<p>The programme will aim to reduce any administrative tasks for teachers related to their participation as much as possible. The evaluation will also aim to streamline data collection and inputs from teachers. Surveys will be no longer than 15 minutes in length and interviews will be arranged through school administrative staff where possible and at a time convenient to teachers' schedules. The case studies will explore whether teachers' participation to the RLC resulted in any negative impacts, and the role that school leaders played in ensuring teachers were able to commit their time to the programme.</p> <p>Likelihood: Medium Impact: Medium</p>

### Timeline

Phase	Timing	Lead
Protocol and research tools development	Oct 2021	IM
Round 1 Teacher survey launched	Nov 2021	IM
Programme launch	Nov 2021	DU / WWCS
Workshop observations	Nov 2021 – May 2022	IM
Case study interviews	Mar 2022 – May 2022	IM
Round 2 Teacher survey launched	Apr 2022 – May 2022	IM
Application to access NPD data	May 2022 – Aug 2022	IM
Initial data analysis	Aug 2022 – Oct 2022	IM
Interim report	Nov 2022	IM

Access to NPD data results	Aug 2022 – Feb 2023	IM
Final report	Mar 2023	IM

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## Appendix 1

### Teacher questionnaire

#### **1. INTRODUCTION & DEMOGRAPHICS**

##### **INTROSCRN**

##### **Show all**

We, Ipsos MORI, an independent research and evaluation organisation, are conducting an evaluation of the Research Learning Communities programme, which your school has elected to participate in, on behalf of What Works for Children's Social Care (WWCSC).

We want to hear from you, Subject Leads, Designated Teachers, and year 5 and 6 teachers, about how you/your school develop and implement new teaching strategies, and the types of information you use to inform decisions on teaching and learning specifically for children in need (CIN) and looked after children (LAC). We will also ask some questions about your knowledge of the evidence relating to teaching and learning and what makes a difference to CIN/LAC outcomes.

The survey will take around 15 minutes to complete. The research is being carried out in accordance with the Market Research Society (MRS) Code of Conduct. All of your answers (including your name and school) will remain confidential and will be used for the purposes of this research only. Survey findings will only be reported in an aggregated format; you and your school will not be identifiable in any of the findings shared with the WWCS or publicly. Further information can be found in our [Privacy Notice](#).

If you have any questions, please contact us at [RLCevaluation@ipsos-mori.com](mailto:RLCevaluation@ipsos-mori.com)

**By clicking agree below, you agree to give your views. Your participation is voluntary, and you can change your mind at any time.**

**Are you happy to take part?**

- 1) I agree to participate in the survey
- 2) I don't want to take part **THANK AND CLOSE**

**NAME**  
**Ask all**

**What is your name? [TEXT BOX – 100 characters]**

**SCHOOL**  
**Ask all**  
**OPEN**

**Which school do you currently work at? [DROPDOWN]**

**TEACHERROLE**  
**Ask all**  
**MULTI CODE**

**Which of the following best describes your role?**

- 1 Senior leader (e.g. headteacher, principal, director, deputy or assistant headteacher)
2. Middle leader (e.g. head of department, subject or curriculum area leader, key stage leader, pastoral services leader)
3. Classroom teacher
4. Other role (please specify)

**SURVEYROLE**  
**Ask all**  
**SINGLE CODE**

**What is your role in relation to the RLC programme?**

1. Designated Teacher
2. Subject Lead

3. Year 5 teacher
4. Year 6 teacher

### **SUBJECTLEAD**

**Ask Subject Leads (SURVEYROLE = 2)**

**SINGLE CODE**

**What subject do you lead?**

1. English
2. Mathematics
3. Other (please specify)

### **EXP**

**Ask all**

**SINGLE CODE**

**How long have you been in the teaching profession?**

*Please select the response that describes the length of your whole teaching career, including career breaks.*

1. 30 years or more
2. 20-29 years
3. 10-19 years
4. 5-9 years
5. 1-4 years
6. First year of teaching (NQT)

### **QUALS**

**Ask all**

**SINGLE CODE EXCEPT CODE 8**

**Which, if any, is the highest educational or professional qualification you have obtained?**

1. Bachelor's degree
2. Postgraduate certificate in education (PGCE)
3. Second postgraduate degree, beyond my PGCE
4. Masters / Postgraduate degree different to your PGCE
5. PhD
6. Other (please specify)

### **CINAWCUR**

**Ask all**

**SINGLE CODE**

**Do you currently teach or are responsible for developing teaching and learning strategies for a child in need or looked after child in any of your year 5 or 6 classes?**

1. Yes
2. No
3. Don't know

**CINAWPREV**

**Ask all**

**SINGLE CODE**

**Are you aware of the children in your year 5 and 6 classes that have previously been in need or looked after at any point in the last six years?**

1. Yes, all of them
2. Yes, some of them, but probably not all of them
3. No, none of them

## **2. YOUR GENERAL APPROACH TO TEACHING AND LEARNING TO SUPPORT THE PROGRESS OF CIN/LAC**

**DEVSCRN**

**Ask all**

We would now like to ask you about how you develop your teaching to support the progress of CIN and LAC.

**SUPPORT**

**Ask all**

**To what extent do you use/apply teaching approaches tailored to CIN and LAC in your classes?**

1. To an extremely large extent
2. To a very large extent
3. To a large extent
4. To a moderate extent
5. To a small extent
6. To a very small extent
7. To an extremely small extent

**SOURCE**

**Ask all**

**SINGLE CODE**

**To what extent do you consult the following sources when deciding on your approaches to support the progress of CIN and LAC?**

*Please select one response in each row.*

- A. Pupil performance data
- B. External organisations (e.g. academy chain, local authority, DfE or Ofsted)
- C. Articles, reports, books or summaries based on **academic research** (paper or web based)
- D. Articles, reports, books or summaries based on **teacher experience** (paper or web based)
- E. Information gathered through training/CPD
- F. Online evidence platforms or databases (e.g. the Sutton Trust Teaching and Learning Toolkit)
- G. Guidance from exam boards
- H. Colleagues within my own school
- I. Colleagues in other schools
- J. Action research conducted by me or my colleagues

- 1. A lot
- 2. A little
- 3. Not at all

### **SOURCEUNDER**

**Ask all**

**SINGLE CODE**

**How easy do you find it to understand the information that these sources provide about how to support the progress of CIN and LAC?**

*Please select one response in each row.*

- A. Pupil performance data
- B. External organisations (e.g. academy chain, local authority, DfE or Ofsted)
- C. Articles, reports, books or summaries based on academic research (paper or web based)
- D. Articles, reports, books or summaries based on teacher experience (paper or web based)
- E. Information gathered through training/CPD
- F. Online evidence platforms or databases (e.g. the Sutton Trust Teaching and Learning Toolkit)
- G. Guidance from exam boards
- H. Colleagues within my own school
- I. Colleagues in other schools
- J. Action research conducted by me or my colleagues

- 1. Very easy
- 2. Quite easy
- 3. Not very easy
- 4. Not at all easy
- 5. I don't use this source

### **CINEFF**

**Ask all**

**SINGLE CODE**

**How confident do you feel in developing and implementing new teaching practices for CIN and LAC in your classrooms?**

1. Very confident
2. Confident
3. Fairly confident
4. Not confident
5. Don't know

### **CINCONFACA**

**Ask all**

**SINGLE CODE**

**How confident do you feel in using academic evidence to develop and implement new teaching practices for CIN and LAC in your classrooms?**

1. Very confident
2. Confident
3. Fairly confident
4. Not confident
5. Don't know

### **CINCONFCLASS**

**Ask all**

**SINGLE CODE**

**How confident do you feel in conducting action research to develop and implement new/adjust existing teaching and learning strategies for CIN and LAC in your classrooms? (By 'action research' we mean information from trialling and testing new approaches or strategies in your classroom using an action research cycle.)**

1. Very confident
2. Confident
3. Fairly confident
4. Not confident
5. Don't know

### **WAVE 1: RLCNEED.**

**Ask all**

**MULTI CODE UP TO 3**

**Which of the below statements are the three most important reasons for why you are participating in the RLC programme? *Please select up to three responses only.***

1. To support CIN/LAC in my school achieve better learning outcomes
2. To support my school's priority to improve learning outcomes and attainment targets for CIN/LAC
3. To support other teachers to improve the approaches they use for CIN/LAC
4. To advance my professional career
5. To help build the evidence base around what works for improving the learning outcomes of CIN/LAC

6. To support my school's priority to increase the use of evidence in teaching
7. To improve my quality of teaching and increase the variety of sources that I can use to educate pupils
8. Because my school asked me to take part
9. Because other teachers are also participating
10. To be recognised by my school leaders for contributing to the programme

**WAVE 1: RLCMOTIV.**

**Ask all**

**SINGLE CODE**

**To what extent do you feel motivated to participate in the RLC programme?**

1. Very motivated
2. Motivated
3. Fairly motivated
4. Not motivated
5. Don't know

**3. ABOUT A SPECIFIC APPROACH TO SUPPORTING THE PROGRESS OF CIN/LAC**

**WAVE 2: SPECAPP**

**Ask all**

**OPEN RESPONSE**

**Please name in the box below a specific approach that you have used within the last academic year to support the progress of CIN and LAC. For example, this could be a teaching method, or a resource, product, or initiative.**

Activity name/brief description (please write in the box below)

**WRITE IN**

**WAVE 2: IDENAPP**

**Ask all**

**MULTI CODE**

**Which, if any, of the following were important in identifying the approach you named above?**

*Please select all that apply.*

1. Ideas generated by me or my school
2. Ideas from other schools
3. Advice from my academy chain or local authority
4. Articles, reports, books or summaries based on **academic research** (paper or web based)
5. Articles, reports, books or summaries based on **teacher experience** (paper or web based)
6. The promotional materials of an external supplier

7. Action research conducted by me or my colleagues
8. Information gathered through training/CPD
9. Online evidence platforms or databases (e.g. the Sutton Trust Teaching and Learning Toolkit)
10. Guidance from official bodies such as DfE and Ofsted
11. Guidance from exam boards
12. Don't know
13. Other (please specify)

### **WAVE 2: APPTRAIN**

**Ask used information from training/CPD (IDENAPP = 8)**

#### **MULTI CODE**

**Please indicate, from the list below, what the training/CPD was based on.**

*Please select all that apply.*

1. Exam board information
2. Academic research
3. Ideas from my school (e.g. internal INSET)
4. Ideas from other schools
5. Expertise of an external consultant
6. Expertise of a programme provider
7. Local Authority/Academy Chain guidance
8. Action research conducted by me or my colleagues
9. Other (please specify)

### **WAVE 2: IMPAPP**

**Ask if selected 4 or more options for identifying their approach (SELECTED 4+ CODES AT IDENAPP)**

#### **MULTI CODE UP TO 3**

**Which were the three most important in identifying the approach you named above?**

*Please select up to three responses only.*

#### **SHOW CODES SELECTED AT IDENAPP**

1. Ideas generated by me or my school
2. Ideas from other schools
3. Advice from my academy chain or local authority
4. Articles, reports, books or summaries based on **academic research** (paper or web based)
5. Articles, reports, books or summaries based on **teacher experience** (paper or web based)
6. The promotional materials of an external supplier
7. Action research conducted by me or my colleagues
8. Information gathered through training/CPD
9. Online evidence platforms or databases (e.g. the Sutton Trust Teaching and Learning Toolkit)
10. Guidance from official bodies such as DfE and Ofsted

11. Guidance from exam boards
12. Don't know
13. Other (please specify)

**WAVE 2: INFLAPP**

**Ask if used options other than training/CPD for identifying approach (IDENAPP = 1-7, 9-13)**

**SINGLE CODE**

**Please rate the level of influence that each of the following factors had on the decision to adopt your approach.**

*Please select one response in each row.*

We thought the approach...

- A. ...would be straightforward to implement
- B. ...was likely to be popular with staff
- C. ...was likely to be popular with parents
- D. ...was likely to be popular with CIN/LAC
- E. ... was inexpensive
- F. ...was backed by academic research
- G. ...was a good fit with existing practices
- H. ...aligned with our professional experience

1. Strong influence
2. Some influence
3. No influence
4. Not applicable

**WAVE 2: EFFAPP**

**Ask all**

**SINGLE CODE**

**How effective do you think your approach has been so far in supporting the progress of CIN and LAC?**

*Please select one response only.*

1. Very effective
2. Quite effective
3. Not very effective
4. Not at all effective
5. Don't know
6. It is too early to tell

**WAVE 2: HOWEFF**

**Ask if think approach was effective (IF EFFAPP = 1, 2)**

**MULTI CODE**

### **How do you know that the approach has been effective?**

*Please select all that apply.*

1. I/my colleagues like it
2. CIN/LAC seem to like it
3. CIN/LACs' work shows an improvement
4. Our CIN/LAC performance data shows an improvement
5. Our own evaluation shows a positive impact on CIN/LAC attainment
6. We've had an independent evaluation which shows a positive impact upon CIN/LAC attainment

#### **WAVE 2: NOTEFF**

**Ask if think approach was not effective (IF EFFAPP = 3,4)**

**MULTI CODE**

### **How do you know that the approach has not been effective?**

*Please select all that apply.*

1. I/my colleagues don't like it
2. CIN/LAC don't seem to like it
3. CIN/LACs' work does not show an improvement
4. Our CIN/LAC performance data does not show an improvement
5. Our own evaluation does not show a positive impact on CIN/LAC attainment
6. We've had an independent evaluation which does not show a positive impact upon CIN/LAC attainment

## **4. EVIDENCE-BASED TEACHING AND USING EVIDENCE FROM RESEARCH**

### **EBTEACH**

**Ask all**

**MULTI CODE UP TO 3**

### **What does the term 'evidence-based teaching' mean to you?**

*Please select up to three responses that best describe your understanding of the term.*

1. Conducting action research and applying the learning
2. Learning from colleagues and applying the learning
3. Applying Ofsted or DfE guidance
4. Using an online evidence platform/database (e.g. Sutton Trust Toolkit) and applying the learning
5. Applying exam board guidance
6. Combining academic research evidence with my professional expertise
7. Using pupil performance data to track pupil progress and plan ahead
8. Applying the recommendations of an external supplier
9. Reading and applying information from academic research or from working with researchers
10. Learning from external consultants, trainers or advisors
11. I don't know

### **RESEARCHINF**

**Ask all**  
**SINGLE CODE**

**This question aims to find out how (if at all) you use academic research information in your work. (By ‘academic research’ we mean information from books, reports, articles, summaries, training or events that is based on academic studies.)**

**Please indicate the extent to which you agree or disagree with the following statements.**

*Please select one response in each row.*

- A. Information from academic research plays an important role in informing my/our teaching practice
- B. I do not believe that using information from academic research will help to improve CIN/LAC outcomes
- C. I know where to find relevant academic research that may help to inform teaching methods/practice
- D. My school leaders/governors do not encourage me to use information from academic research to improve my practice
- E. I am able to relate information from academic research to my context
- F. Other staff in my school rarely use information from academic research to inform their teaching practice
- G. I feel confident about analysing information from academic research
- H. Information from academic research conducted elsewhere is of limited value to our school
- I. I use information from academic research to help me to decide how to implement new approaches in the classroom

- 1. Strongly agree
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Strongly disagree

**YEARAC**  
**Ask all**  
**MULTI CODE**

**In the last year, how (if at all) have you used information from academic research to inform your practice?**

*Please select all that apply.*

- 1. I have not used information from academic research in the last year

Or, in the last year I have used information from academic research to:

- 2. discuss best practice with colleagues
- 3. reflect on my own practice

4. change classroom practice (this could be starting, developing or discontinuing an approach)
5. contribute to my own research/enquiry
6. influence colleagues to change their classroom practice (this could be starting, developing or discontinuing an approach)
7. improve my knowledge of a topic or subject

### ACUSED

Ask if changed classroom practice or influenced colleagues to do so (IF YEARAC = 4, 6)

### MULTI CODE

**What was it about the academic research information that enabled you to change classroom practice?**

*Please select all that apply.*

1. It was clear (e.g. language, style, presentation)
2. It was convincing
3. I was able to discuss the research with a researcher or someone else who understood it
4. I could see clearly how the research related to our context
5. There was coaching and training available based on the research
6. It contained practical guidance about how to apply the research in the classroom
7. I was able to see the research being applied in another school
8. It encouraged collaborative enquiry
9. It was supported by resources (e.g. funding, materials)
10. School leaders were bought into the research
11. Other staff were bought into the research
12. Other (please say what)

### NOTUSED

Ask if not changed classroom practice or influenced colleagues (IF YEARAC = 2, 3, 5, 7)

### MULTI CODE

**Which of the following best describe why you have not changed classroom practice based on academic research?**

*Please select all that apply.*

1. The research supports our existing approach
2. We are still planning changes to practice (either starting, developing or discontinuing an approach)
3. The information was unclear (e.g. language, style, presentation)
4. The information was not convincing
5. It didn't contain practical guidance about how to apply the research in the classroom
6. There was no information about how the research had been applied in other schools
7. I was unable to discuss the research with a researcher or someone else who understood it
8. I was unable to see clearly how the research related to our context
9. There was no coaching or training available based on the research
10. We had insufficient resources (e.g. time, staff, budget) to make changes

11. It was difficult to convince school senior leaders
12. It was difficult to convince other staff
13. Other (Please say what)

## RESEARCHACTION

Ask all

### SINGLE CODE

**This question aims to find out how (if at all) you use action research in your work. (By 'action research' we mean information from trialling and testing new approaches or strategies in your classroom using an action research cycle.)**

**Please indicate the extent to which you agree or disagree with the following statements.**

*Please select one response in each row.*

- A. Action research plays an important role in informing my/our teaching practice
- B. I do not believe that using information from action research will help to improve CIN/LAC outcomes
- C. My school leaders/governors do not encourage me to use action research to improve my practice
- D. Other staff in my school rarely use action research to inform their teaching practice
- E. I feel confident about analysing information from action research
- F. Information from action research conducted in other classes is of limited value to my class
- G. I use action research to help me to decide how to implement new approaches in the classroom

1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree

## YEARACTION

Ask all

### MULTI CODE

**In the last year, how (if at all) have you used action research to inform your practice?**

*Please select all that apply.*

1. I have not used action research in the last year

Or, in the last year I have used action research to:

2. discuss best practice with colleagues
3. reflect on my own practice
4. change classroom practice (this could be starting, developing or discontinuing an approach)
5. contribute to my own research/enquiry

6. influence colleagues to change their classroom practice (this could be starting, developing or discontinuing an approach)
7. improve my knowledge of a topic or subject

### **ACTIONUSED**

**Ask if changed classroom practice or influenced colleagues to do so (IF YEARACTION = 4, 6)**

#### **MULTI CODE**

**What was it about the action research that enabled you to change classroom practice?**

*Please select all that apply.*

1. The results of the approach I/we trialled were convincing
2. I was able to discuss the results with a colleague or someone else who understood the action research process
3. There was coaching and training available on how to conduct the action research and apply learnings from it to change classroom practice
4. I used the findings from action research that was conducted in another classroom or school
5. The action research process encouraged collaborative enquiry
6. The action research was supported by sufficient resources (e.g. funding, materials)
7. School leaders were bought into the new practice
8. Other staff were bought into the new practice
9. Other (please say what)

### **ACTIONNOTUSED**

**Ask if not changed classroom practice or influenced colleagues (IF YEARACTION = 2, 3, 5, 7)**

#### **MULTI CODE**

**Which of the following best describe why you have not changed classroom practice based on action research?**

*Please select all that apply.*

1. The results supports our existing approach
2. We are still planning changes to practice (either starting, developing or discontinuing an approach)
3. The results of the approach I/we trialled were not convincing
4. There was no information about similar approaches that had been trialled in other classrooms or schools
5. I was unable to discuss the action research with a colleague or someone else who understood it
6. There was no coaching and training available on how to conduct the action research and apply learnings from it to change classroom practice
7. We had insufficient resources (e.g. time, staff, budget) to make changes
8. It was difficult to convince school senior leaders
9. It was difficult to convince other staff
10. Other (please say what)

## **5. YOUR KNOWLEDGE ABOUT ACADEMIC AND ACTION RESEARCH**

### **KNOWLEDGESCRN**

**Show all**

In this section we would like to gather some information about your knowledge of academic and action research. Please answer the questions without referring to other sources.

### **TRUEFALSE**

**Ask all**

**SINGLE CODE**

**Current understanding from academic research suggests that each of the following statements is 'true' or 'false'.**

*Please select the answer that you know to be correct in each row. If you are not sure, please select 'don't know'.*

**The research says that:**

- A. Drinking six to eight glasses of water per day improves pupil learning outcomes
- B. Reducing class size is one of the most cost-effective ways to improve pupil learning outcomes
- C. Extending the school day is more likely to improve learning outcomes for pupils on Free School Meals than pupils not on Free School Meals
- D. Interventions that focus solely on raising pupil aspirations have little impact on learning outcomes
- E. Setting pupils by ability improves learning outcomes for all pupils
- F. Individual pupils learn best when they receive information in their preferred learning style (e.g. auditory, visual, kinaesthetic)
- G. Peer tutoring (students supporting other students with their learning) usually benefits the pupil being tutored more than the pupil doing the tutoring
- H. Homework has a greater impact on pupil's learning outcomes at secondary school than at primary school

- 1. True
- 2. False
- 3. Don't know

### **TRUEFALSEAR**

**Ask all**

**SINGLE CODE**

**Each of the following statements relating to action research is 'true' or 'false'.**

*Please select the answer that you know to be correct in each row. If you are not sure, please select 'don't know'.*

- A. Action research involves a cycle of inquiry involving analysing what is/isn't working, developing new solutions, implementing, testing, evaluating, and refining them to develop better strategies over time.

- B. Action research does not require the use of academic research.
- C. Action research requires teachers to gather their own evidence and data in their classrooms.
- D. Action research requires the input of a trained academic or professor to be robust.
- E. Trialling a new approach and seeing if it worked is the equivalent of action research.
- F. Theories of Action or hypotheses for action research can only be developed once results are observed.
- G. Personal reflections on teaching practice should be factored into action research.

- 1. True
- 2. False
- 3. Don't know

## METHODS

Ask all

### SINGLE CODE

In the left-hand column are descriptions of three reasons why someone would want to carry out research. In the right-hand column is a list of five research methods.

Please draw a line to match the research purpose (left hand column) with the best research method for achieving it (right hand column). There are only three matches – two methods are incorrect (please do not make multiple matches).

#### Research purpose

- A. To provide an overview of the evidence base
- B. To determine whether an intervention or approach has a direct impact on pupil learning outcomes
- C. To understand how an intervention or approach works in practice

#### Research method

- 1. Randomised Control Trial
- 2. Longitudinal study
- 3. Interviews and questionnaires
- 4. Literature review
- 5. Correlational study

## METHODSCONF

Ask all

### SINGLE CODE

To what extent are you confident in appraising the robustness of different research methods and sources of evidence?

- 1. Very confident
- 2. Confident
- 3. Fairly confident
- 4. Not confident
- 5. Don't know

**ACADCONF**  
**Ask all**  
**SINGLE CODE**

**To what extent are you confident in your current knowledge of relevant academic research about teaching practices for CIN/LAC?**

1. Very confident
2. Confident
3. Fairly confident
4. Not confident
5. Don't know

**ACTIONCONF**  
**Ask all**  
**SINGLE CODE**

**To what extent are you confident in your current knowledge of action research?**

1. Very confident
2. Confident
3. Fairly confident
4. Not confident
5. Don't know

**6. THE RLC PROGRAMME**

**WAVE 2: PROGSCRN**  
**SHOW ALL**

The next questions are about your participation in the Research Learning Communities (RLC) programme.

**WAVE 2: WRKSHOPNUM**  
**Ask DTs and SLs (IF SURVEYROLE = 1,2)**  
**NUMERIC WRITE IN**

**How many RLC workshops have you attended over this academic year (2021/22)?**

**WAVE 2: INDEPSTUDY**  
**Ask DTs and SLs (IF SURVEYROLE = 1,2)**  
**NUMERIC WRITE IN**

**On average, how many hours of independent study, if any, did you undertake between each RLC workshop? (By independent study, we mean reading additional literature to that discussed in the workshops to further inform and refine your teaching strategies.)**

## WRITE IN NUMBER

### WAVE 2: BETWINTERACT

Ask DTs and SLs (IF SURVEYROLE = 1,2)

#### NUMERIC WRITE IN

**On average, how many hours, if any, did you spend interacting with facilitators in between each RLC workshop?**

#### WRITE IN

### WAVE 2: RLCRATE

Ask DTs and SLs (IF SURVEYROLE = 1,2)

#### SINGLE CODE

**How would you rate the following aspects of the RLC programme?**

*Please select one response only for each aspect.*

- A. The quality of the workshop content
- B. The amount of workshops
- C. The relevance of the workshop content
- D. The length of each workshop
- E. The timing of each workshop (e.g. time of day / week)
- F. The quality of the workshop facilitators

- 1. Very good
- 2. Fairly good
- 3. Neither good nor poor
- 4. Fairly poor
- 5. Very poor
- 6. Don't know/no opinion

### WAVE 2: RLCCOLWS

Ask DTs and SLs (IF SURVEYROLE = 1,2)

#### SINGLE CODE

**How would you rate the quality of your collaboration with other teachers in the RLC workshops?**

*Please select one response only for each aspect.*

- A. Participation and engagement of other participants in the workshops
- B. Collaboration between participants in the workshops
- C. Collaboration with your school's Subject Lead or Designated Teacher in the workshops
- D. Ability for participants to share open and honest opinions with others in a collaborative workshop environment

- 1. Very good
- 2. Fairly good

3. Neither good nor poor
4. Fairly poor
5. Very poor
6. Don't know/no opinion

**WAVE 2: RLCCOLY56**

**Ask DTs and SLs (IF SURVEYROLE = 1,2)**

**SINGLE CODE**

**How would you rate the quality of your collaboration with your school's year 5 and 6 teachers on the development and implementation of new teaching strategies?**

1. Very good
2. Fairly good
3. Neither good nor poor
4. Fairly poor
5. Very poor
6. Don't know/no opinion

**WAVE 2: RLCCOLSCL**

**Ask if year 5 or 6 teacher (SURVEYROLE = 3,4)**

**SINGLE CODE**

**How would you rate the quality of your collaboration with other teachers?**

*Please select one response only for each aspect.*

- A. Collaboration with your school's Designated Teacher on the development and implementation of new teaching strategies
- B. Collaboration with your school's Subject Lead on the development and implementation of new teaching strategies
- B. Collaboration with other year 5 and 6 teachers on the development and implementation of new teaching strategies

1. Very good
2. Fairly good
3. Neither good nor poor
4. Fairly poor
5. Very poor
6. Don't know/no opinion

**WAVE 2: RESOURCEUSE**

**Ask DTs and SLs (IF SURVEYROLE = 1,2)**

**SINGLE CODE**

**Since starting the RLC workshops, have you...**

- A. Applied resources from the workshops to classroom teaching
- B. Applied resources from the workshops to advise/educate other teachers

- C. Developed Theories of Action as per the RLC workshop guidance materials
- D. Conducted outreach activities to promote/cascade new teaching strategies to other year 5 and 6 teachers

- 1. Yes
- 2. No
- 3. Don't know

**WAVE 2: TOADEV**

Ask if conducted outreach activities with y5&6 teachers (IF RESOURCEUSE CODE D = 1)

**OPEN**

**What types of outreach activities have you delivered to promote/cascade new teaching strategies among other year 5 and 6 teachers in your school?**

**WRITE IN**

**WAVE 2: EFFOUT**

Ask if conducted outreach activities with y5&6 teachers (IF RESOURCEUSE CODE D = 1)

**SINGLE CODE**

**Do you feel that your efforts to promote/cascade new teaching strategies to other year 5 and 6 teachers in your school were effective?**

- 1. Yes
- 2. No
- 3. Don't know

**WAVE 2: EFFOUTWHY**

Ask if answered yes or no to EFFOUT (IF EFFOUT = 1, 2)

**OPEN**

**Why do you/don't you think your efforts to promote/cascade new teaching strategies to other year 5 and 6 teachers in your school were effective?**

**WRITE IN**

**WAVE 2: SUSTAIN**

Ask y5&6 teachers (IF SURVEYROLE = 3,4)

**SINGLE CODE**

**Do you think the new teaching strategies promoted by Designated Teachers (DTs) and Subject Leads (SLs) this year will continue to be used in future?**

- 1. Yes
- 2. No

3. Don't know

**WAVE 2: SUSTAINWHY**

**Ask if answered yes or no to SUSTAIN (IF SUSTAIN = 1, 2)**

**OPEN**

**Why do you/don't you think the new teaching strategies promoted by Designated Teachers (DTs) and Subject Leads (SLs) this year will continue to be used in future?**

**WRITE IN**

**WAVE 2: RLCWIDERCIN**

**Ask all**

**SINGLE CODE**

**To what extent do you agree or disagree with the following statements:**

- A. The RLC programme has been relevant to the needs of CIN/LAC
- B. The RLC programme has been useful for implementing new teaching strategies for CIN/LAC
- C. The RLC programme has led to positive changes in CIN/LAC behaviour or learning outcomes as a result of new teaching strategies
- D. The RLC programme has led to wider positive changes in culture and practices among other year 5 and 6 teachers
- E. The RLC programme adds value or new benefits for supporting teachers to use research evidence and develop and implement new teaching strategies, compared to previous programmes / initiatives at my school.
- F. The RLC programme has helped to introduce new and innovative practices to my school.
- G. Through the RLC programme I have acquired new, practical skills.
- H. In my school, Designated Teachers and Subject Leads play a leadership role in supporting other teachers to develop new teaching strategies.

- 1. Strongly agree
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Strongly disagree
- 6. Don't know

**WAVE 2: PROGCIN**

**Ask if agree RLC has led to positive changes in CIN/LAC behaviour (RLCWIDERCIN C = 1, 2)**

**OPEN RESPONSE**

**What have been the positive changes in CIN/LAC behaviour or learning outcomes in Literacy or Mathematics that you have seen because of new teaching strategies from the RLC programme?**

**Please do not mention personal or identifying details of specific pupils.**

**WRITE IN**

**WAVE 2: PROGWIDER**

**Ask if agree RLC has led to positive changes in the school community  
(RLCWIDERCIN D = 1, 2)**

**OPEN RESPONSE**

**What have been the wider positive changes in culture and practices among other year 5 and 6 teachers that you have seen as a result of the RLC programme?**

**WRITE IN**

**WAVE 2: PROGADD**

**Ask if agree RLC has led to new benefits or added value (IF RLCWIDERCIN E = 1, 2)**

**OPEN RESPONSE**

**What new benefits or added value has the RLC programme provided compared to other previous / existing initiatives at your school?**

**WRITE IN**

**WAVE 2: PROGSKILLS**

**Ask if agree RLC has led to new benefits or added value (IF RLCWIDERCIN G = 1, 2)**

**OPEN RESPONSE**

**What new, practical skills have you acquired through the RLC programme?**

**WRITE IN**

**WAVE 2: PROGIMPR**

**Ask all**

**OPEN RESPONSE**

**In your view, what, if anything, could be improved about the RLC programme?**

**WRITE IN**

**7. CLOSE**

**RECONTACT**

**Ask all**

**SINGLE CODE**

**To assess the impact of the RLC programme, Ipsos MORI would like to invite you to take part in the second round of the survey in May of next year. It will always be up to you whether you take part. Do you consent to being re-contacted for this purpose?**

1) Yes

2) No

**RECONDET**

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1. EMAIL: [TEXT BOX – 100 characters]

**HARDCHECK if answer provided and has spaces or does not include @ or full-stop:**

“Please check and amend. E-mail addresses should not contain any spaces and should contain an @ character and a full stop.”

2. PHONE (that you can be contacted on): [TEXT BOX – numbers only]

3. Prefer not to say

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Thank you for participating in this survey.

We have provided you with further information in the Privacy Notice. This explains the purposes for processing your personal data as well as your rights under data protection regulations to access your personal data, withdraw consent, object to processing of your personal data and other required information.

If you have any questions about the survey or your data, please contact [RLCevaluation@ipsos-mori.com](mailto:RLCevaluation@ipsos-mori.com).

## Trial Evaluation Protocol Research Learning Communities (The RLC programme)

### Research Learning Communities (RLC)

Intervention Developer	School of Education, Durham University
Delivery Organisations	School of Education, Durham University
Evaluator	Ipsos MORI
Principal Investigator	Elpida Acharidou
Protocol Author(s)	Elpida Acharidou, Karl Ashworth, Nadia Badaoui, Stella Capuano, Emily Mason, Jaimin Shah, Adam Behailu
Type of Trial	Two-armed randomised control trial with school-level allocation, with pupils clustered within schools and schools stratified by local authority (LA)
Age or Status of Participants	The intervention will involve 240 primary schools in 6 LAs. Within each primary school, Subject Leads and Designated Teachers will form the cohort of participants attending a series of RLC sessions and workshops. Year 5 and 6 teachers will also participate in implementing new/adjusting existing teaching strategies developed by workshop participants for their primary schools and pupils. In particular, the evaluation will target year 6 pupils who have been Children in Need (CIN) or looked after children (LAC) at any point in the last six years.
Number of Participating Schools by Local Authority	240 in total, 40 per local authority
Number of Children	720 year 6 CIN/LAC
Primary Outcome(s)	Pupil Key Stage 2 (KS2) attainment data from May 2022 in Literacy and Mathematics for CIN/LAC in year 6 at the start of the evaluation, accessed via the National Pupil Database (NPD)
Secondary Outcome(s)	Pupil KS2 attainment data in Grammar, Punctuation and Spelling (GPS) for pupils in year 6 at the start of the evaluation <sup>6</sup>

<sup>6</sup> KS2 Writing is excluded as an outcome as it is based on a teacher assessment and may have a lower correlation with other KS2 measures, Allen, 2016.

Teacher outcomes (measured by four measures of 1) knowledge of academic/action research, 2) attitudes towards the use of academic/action research, 3) use of academic/action research in teaching practice, and 4) implementation of improved teaching practices for CIN/LAC in the teacher questionnaire)

## Summary

The Research Learning Communities programme aims to improve Literacy and Mathematics outcomes of Children in Need (CIN) and Looked After Children (LAC), by supporting Subject Leads, Designated Teachers and year 5 and 6 teachers in primary schools to further develop and implement research-informed teaching strategies.

The RLC programme will be developed and delivered by the School of Education in Durham University, between October 2021 and May 2022. Although the programme was previously delivered to schools and was evaluated, it is the first time that it will be focusing on supporting teachers to develop evidence-based teaching strategies specifically for CIN/LAC.

To do so, trained facilitators will develop and deliver a series of six workshops, preceded by an introductory session, and closed by a final 'moving forward' session, with Subject Leads and Designated Teachers across 240 primary schools in 6 local authorities (LAs).

To evaluate the RLC programme, this study will conduct an impact evaluation, an implementation and process evaluation, and a cost analysis using a mixed methods approach. In summary:

- **The impact evaluation** will involve a randomised control trial (RCT) of year 6 pupils' CIN/LAC KS2 scores in Literacy and Mathematics, supplied by the National Pupil Database (NPD); and an assessment of teachers' knowledge of academic/action research, attitudes towards the use of research, use of academic/action research in practice, and implementation of improved teaching practices for CIN/LAC, assessed through a pre- and post- teacher questionnaire.
- **The implementation and process evaluation (IPE)** will also draw on the pre- and post- teacher questionnaires, and, in addition, include a series of case studies, (consisting of interviews with school leaders and teachers in intervention and control schools) and observations of RLC workshops.
- **The cost analysis** will collect data on delivery team costs for the implementation of the programme, teacher cover costs to attend RLC workshops and sessions, programme costs (such as costs incurred by virtual schools to recruit schools into the programme), as well as costs for facilities, equipment, and materials, among others. This data will be gathered by the delivery team and through teachers in the teacher questionnaire.

**Note:** Since recruitment for the programme is still ongoing at the time of writing, this trial protocol has been developed based on an estimated number of schools and local authorities provided by the WWCS. We have also estimated the number of teachers and CIN/LAC per school based on publicly available data. An updated protocol will be published after school recruitment has been finalised.

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## Background and Problem Statement

### Background

In the past decade, there has been increased interest in using evidence to inform teaching practice. Such interest was generated following research findings which pointed to teaching practice not being systematically evidence informed (Judkins, 2014) and teachers relying on their own experience as evidence of what works (Goldacre, 2013). Further, research evidence pointed to the challenge of changing teachers' attitudes towards research evidence. For example, a small-scale study involving five schools in the UK found no evidence that teachers' attitudes towards research changed despite being part of a relevant programme (Griggs et al., 2016), whilst 43% of teachers across 414 schools in Australia reported that teacher observations and experience should be prioritised over research (Rickinson et al., 2021).

Research evidence also examined barriers that inhibit the uptake of research evidence among teachers. Examples of such barriers include a lack of skills to interpret and appraise research evidence, limited resources and time, limited access to evidence, and few incentives to use research evidence in practice (Brown and Flood, 2020; Speight et al., 2016; Nelson and O'Beirne, 2014; Sharples, 2013). In addition, there is often a lack of clarity over what 'evidence' looks like and the need for better systems and structures to support the dissemination of evidence in easily digestible and accessible formats for teachers (Caldwell et al., 2015; Goldacre, 2013). Other research into how and what types of evidence can be used to improve teaching practice has found that teachers are often unable to determine what research is valuable to their practice, leading to confusion as to how to apply research effectively (McAleavy and Bennett, 2016).

Globally, a number of interventions have been introduced to support teachers with the above challenges, improve 'knowledge mobilisation' and bridge the gap between research and teaching practice (Brown and Flood, 2020). A recent review of the literature identified eight types of interventions aiming to support research-based pedagogy, including:

- **Professional development interventions** – designed to upskill teachers and equip them with information literacy and research methods skills;
- **Intermediaries** – to translate evidence and make it more accessible;
- **Repositories** – to provide a location and focus for the collection, preservation, and dissemination of research outputs and information;
- **School-university partnerships** – to strengthen the links between researchers and research users, improve the flow of information, and support the use of research to inform and enhance education practice;
- **Communication strategies** – including traditional approaches, such as via peer-reviewed journals and conferences, as well as those using newer technologies and communication channels, including social media;
- **Networks** – to provide formal or informal opportunities for individuals or organisations that have a common interest to engage with one another;
- **Initial Teacher Education (ITT)** – which allows a combination of academic study and time in school; and
- **Regulations, standards, and policies** – to establish accountability and regulatory mechanisms and structures designed to improve the use of research in education (Tripney et al. 2018).

The introduction of such interventions has increased demand for projects that assess the impact that research-use in school settings has on students' educational outcomes (Caldwell et al., 2015; Bennett, 2015). Currently, however, little evaluation exists on the impact of these different types of interventions on evidence use in education, either in terms of the impact on teacher engagement with research, or in terms of classroom practice and pupil outcomes (Tripney et al., 2018; Nelson et al., 2017). Moreover, existing evidence appears mixed or unclear and of poor quality (Tripney et al., 2018).

## **The Research Learning Communities (RLC) programme**

Research Learning Communities (RLC) is a professional development programme aiming to support teachers with the use of research evidence and the implementation of action research, with the ultimate goal of improving pupil outcomes.

RLC has previously been delivered in the UK, including schools which agreed to take part in the programme and their teachers and pupils from across year groups. The programme has also been evaluated, with the most robust evaluation involving a Randomised Control Trial (RCT) with 119 primary schools (of which 60 were in the intervention group) and a process evaluation between 2014-2016. The evaluation assessed RLC's impact on reading outcomes for children in Key Stage 2 (KS2) and teacher outcomes, and concluded that:

- the programme had a positive impact on teachers' disposition towards research, with some evidence that this impact may have been influenced by factors such as the level of postgraduate qualifications or seniority of teachers that took part in the intervention;<sup>7</sup>
- there was some evidence of a small positive relationship between teachers' disposition towards research and pupil outcomes, irrespective of involvement in an RLC; and
- there was no evidence that RLC improves reading outcomes for children at KS2, with some teachers suggesting that it may take a number of years for participation in an RLC to change teaching practice and improve pupil outcomes (Rose, et al. 2017)<sup>8</sup>.

Using pupil data collected as part of the RCT, sub-group analysis was conducted, focusing on children with a social worker and their KS2 results. Despite the small sample sizes of children in the sub-group analysis (which resulted in the findings being inconclusive) the programme did show 'signs of promise'; findings showed that the programme resulted in two months' additional progress in reading attainment for this group of children in intervention schools, compared to children with a social worker in control schools (Sanders et al., 2020).

These 'signs of promise' provided the opportunity to adapt and deliver the RLC programme so that it supports teachers with the use of evidence focusing on CIN/LAC, who generally have lower educational attainment than their classmates and may have an even greater need for tailored and innovative teaching (Berridge et al., 2020). In turn, the evaluation of the

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<sup>7</sup> Two small scale qualitative evaluations have also been conducted by the RLC delivery team in infant, primary, and secondary schools involving a total of 21 teacher interviews. These evaluations reported teachers' perceptions of the positive impact of the programme, including increased: teacher confidence to use research to develop new approaches to teaching and learning; capacity to lead research-informed change; improved teaching practice and perceptions of student learning behaviours and outcomes (Brown et al., 2020; Brown, 2017).

<sup>8</sup> The evaluation was funded by the Education Endowment Foundation (EEF) the Department for Education (DfE) and the Mayor's London Schools Excellence Fund as part of a round of funding exploring research use in schools.

adapted programme was key in order to support the evidence base in this field, which is scarce, by using a robust evaluation design and thus, providing solid evidence on the programme's impact.

## Intervention and Theory of Change

**Note:** Since recruitment for the programme is still ongoing at the time of writing, this trial protocol has been developed based on an estimated number of schools and local authorities provided by the WWCS. We have also estimated the number of teachers and CIN/LAC per school based on publicly available data. An updated protocol will be published after school recruitment has been finalised.

### Overview and rationale

RLC is a professional development programme which aims to support teachers in primary schools to implement research-based teaching strategies that have the potential to improve Literacy and Mathematics outcomes of Children in Need (CIN) and Looked After Children (LAC).

To do so, the programme will bring together primary Subject Leads and Designated Teachers<sup>9</sup> in a series of workshops focusing on raising their understanding and use of educational research in order to develop and implement new teaching strategies or adjust existing teaching strategies for CIN/LAC in their schools. Subject Leads and Designated Teachers are to champion evidence-informed teaching strategies and work with year 5 and 6 teachers as a means to together develop and implement these new/adjusted strategies.

The RLC programme is based on teacher action research, described in simple terms as planning a new teaching strategy, acting on it, observing its effects, reflecting on its effectiveness, revising plans, and repeating the cycle again (Kemmis and McTaggart, 1988). Thus, during the workshops, conceptual research needs to be translated into instrumental action in the classroom. In the workshops, teachers collaborate to review research evidence and share personal experiences to collectively make sense of its implications and applications to teaching practice. The programme intends to build teachers' understanding of research evidence by engaging teachers in:

*'a facilitated process of learning, designed to help them make explicit connections between research knowledge and their own assumptions and knowledge (Katz and Dack, 2013; Nonaka and Takeuchi, 1995). The aim of this process should be to help teachers create new understandings in relation to a given issue or problem'....This then 'culminates in the development of new practices, strategies or innovations informed by research and directed at tackling specific issues of teaching and*

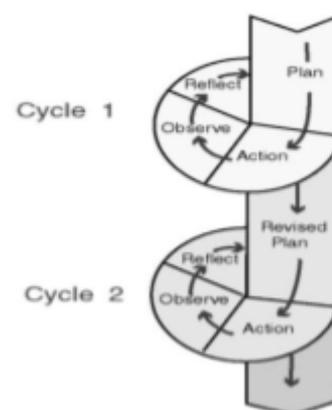


Figure SEQ Figure 1\* ARABIC1: Action research cycle, Kemmis and McTaggart 1988

<sup>9</sup> A Designated Teacher is a teacher or a headteacher/acting headteacher in a school, who is responsible for 'promoting the educational achievement' of looked after and previously looked after children in their schools and ensuring that both policy and practice is attuned to the needs of these pupils. Designated Teachers are mandated to 'take lead responsibility for ensuring school staff understand the things which can affect how looked after and previously looked after children learn and achieve and how the whole school supports the educational achievement of these pupils.' (Great Britain. Department for Education, 2018, p.12).

*learning,*’ which *‘teachers then need to practise using these innovations’* (Brown, 2017).

In this way, RLC aims to facilitate what the programme developers have previously called a ‘cycle of inquiry’ (Brown and Flood, 2020; Brown, 2017), whereby Subject Leads and Designated Teachers are supported to access, evaluate, and apply academic research findings to inform their own teaching and apply them.

In addition, RLC aims to support Subject Leads and Designated Teachers attending the workshops to cascade their learning to year 5 and year 6 teachers in their schools. In order for the RLC to be effective:

*‘the successful roll-out of new practices is dependent on effective change leadership. In other words, initiating innovation represents the introduction of something new and potentially countercultural. As such, there is a risk that new practices are rejected by those required to adopt them. Correspondingly, the effective scale-up of research-informed interventions will be dependent on there being “the right people in the room”: those most likely to make change happen in schools (those with the influence and authority to lead change)... [They must also] explicitly know both what is required to lead change effectively and also their own role in making long-lasting change happen’* (Brown, 2017).

For these reasons, the programme provides participants with training on effective change leadership. It does so by building their understanding of their role in the change leadership process and offering specific strategies and techniques that they can employ in their own school contexts to ensure new practices are adopted / existing practices are adjusted.

To enhance the potential positive impact of the programme, at the outset, RLC also intends to gain the support of Head Teachers/Assistant Head Teachers, whose teachers take part in the programme.

## Who (recipients)

The RLC programme will involve 240 primary schools and 6 virtual schools. Within each school, the intended recipients of the programme include specific cohorts of pupils and teachers.

### Pupils

The programme is intended to improve the outcomes of year 5 and 6 pupils who have been classified as [Children in Need \(CIN\)](#) in the CIN 2020 census or [looked after children](#) (LAC) in the LAC 2020 census in the past six years.<sup>10</sup> CIN and LAC census data are matched to the NPD, data from which will be used to analyse year 6 CIN/LAC pupil Key Stage 2 (KS2) Literacy and Mathematics results in 2021/2022.

### Teachers

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<sup>10</sup> CIN and LAC classifications are aligned with the Children Act of 1989. As per the Act, CIN/CLA encompasses ‘all those children receiving statutory support from local authority social care, including those on a Children in Need Plan, on a Child Protection Plan, and Looked After Children.’

The RLC programme is intended to engage each school's Literacy or Mathematics Subject Lead and its Designated Teacher. Both Subject Leads and Designated Teachers need to attend the RLC sessions and workshops on behalf of each school. Additionally, the programme intends to engage year 5 and 6 teachers, who are expected to support Subject Leads and Designated Teachers with the implementation of new/adjust existing teaching strategies in their schools. Year 5 and 6 teachers will not be attending any of the programme's sessions/workshops.

**Note:** Virtual School Heads<sup>11</sup> (VSH) will also attend the programme to support their own professional development. Given that VSHs are not the intended audience for the programme and will not be developing or implementing new/adjusting existing research-informed teaching practices in the participating schools, they will not be included in the impact or implementation and process evaluation of this study.

### What (procedures and activities)

RLC involves six workshops during which Subject Leads and Designated Teachers engage with the programme's materials and planned activities. Before and after the workshops, teachers are to also attend an introductory session where they are introduced to the programme and a 'moving forward'/wrap-up session in which they reflect on their learning and consider next steps. RLC is to run between October 2021 and May 2022.

### Where (location)

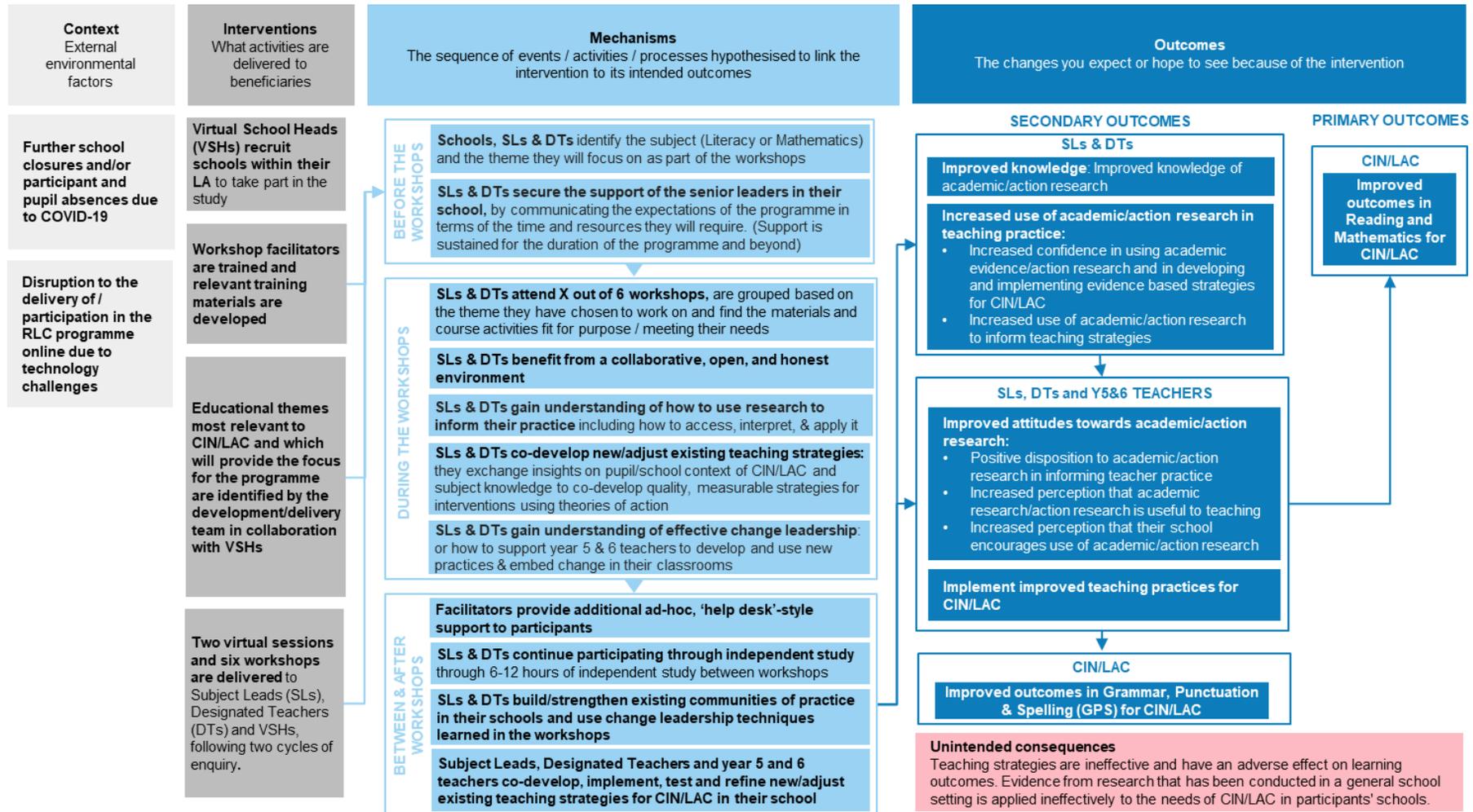
Workshops are intended to be hosted online, with each lasting for approximately two and a half hours. Workshops are to be held after the end of the school day, thus after about 3:30pm, to minimise disruption for teachers and pupils.

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<sup>11</sup> VSHs work strategically across the LA they are appointed by to support the educational attendance, attainment, and progress of CIN/LAC. They do so by providing information and advice to their parents, educators, and others who the VSH considers necessary. VS provide training to Designated Teachers and VSHs and Designated Teachers work closely together to support CIN/LAC as well as promote a whole-school culture to personalise learning for these children (Great Britain. Department for Education, 2021).

# Draft Logic Model

Figure 2: RLC Logic Model



## Context

External environmental factors that could influence the success of the RLC programme include:

- **Further school closures and/or participant and pupil absences due to COVID-19:** Teacher and pupil absences in primary schools due to COVID-19 are still part of school life. This could potentially mean that RLC programme participants need to miss sessions/workshops due to illness or extra workload. Similarly, pupils that might be part of our sample could be absent at the time when new/adjusted teaching practices are implemented, thus reducing the likelihood of positive impact on their KS2 results. In the same vein, positive impact on outcomes for CIN/LAC could be hindered if school closures are required and blended or online learning replaces classroom teaching and face-to-face interactions between pupils and teachers.
- **Disruption to the delivery of/participation in the RLC programme online due to technology challenges:** In contrast to previous RLC programmes, the delivery of these RLC sessions and workshops will be held online rather than in person. Online delivery may present potential benefits, including increase in attendance and allowing for recordings of sessions to be shared with absentees or other teachers, as well as reducing time and costs associated with travel. However, it could also present significant challenges to both facilitators and participants, through issues such as poor internet connectivity or audio and/or video quality, and thus prevent some participants from participating.

## Interventions

The activities expected to take place as part of the intervention involve:

- **Funding from the WWCS** is allocated for the programme.
- **VSHs recruit schools** within their LA to take part in the study.
- **Three facilitators are trained** by the development/delivery team (the School of Education, Durham University) and **intervention materials are developed**, including easy-to-read, practical syntheses of academic research and templates for teachers to develop interventions using the RLC Theory of Action.
- **Educational themes most relevant to CIN/LAC and which will provide the focus for the intervention are identified, by the development/delivery team in collaboration with VSHs.** It is anticipated that four themes considered most pressing for CIN/LAC and their learning (for example, meta-cognition or confidence) will be identified. These themes will provide a 'menu' of options from which Subject Leads and Designated Teachers will choose to focus on and develop relevant teaching strategies for implementation as part of the programme in either Literacy or Mathematics.
- **Two virtual sessions and six workshops are delivered** to Subject Leads, Designated Teachers and VSHs, following two cycles of enquiry. The first cycle of inquiry takes place between workshop 1 and 3, and the same process is repeated during workshops 4 to 6. The table below provides more detail on the sessions/workshops.



Table 1: RLC sessions and workshops

Session / workshop titles	Description of sessions/workshops
Introduction session	<p>Participants,</p> <ul style="list-style-type: none"> <li>• are introduced to the purpose and workings of the RLC programme</li> <li>• gain an understanding of their role and what is expected of them</li> <li>• are informed on how their school's senior leaders, e.g. the Head Teacher and Assistant Head Teacher, need to support them and year 5 and 6 teachers in order for them to be successful in the programme</li> </ul>
Workshop 1: Developing new research informed teaching approaches	<p>Participants,</p> <ul style="list-style-type: none"> <li>• examine and reflect on current teaching practices for CIN/LAC in their school</li> <li>• define their vision and related aims and objectives for what is to be achieved in relation to teaching and learning of CIN/LAC in their school</li> <li>• assess the gap between current practice and their vision, by discussing what research evidence shows about effective practice in this area and their own practical experiences</li> <li>• derive an initial idea of what strategy could be employed and how</li> </ul>
Workshop 2: Testing and refining new initiatives	<p>Participants,</p> <ul style="list-style-type: none"> <li>• implement the new/adjusted strategy in their school and when in the workshop, review pupil data and other relevant information/evidence to assess its effectiveness</li> <li>• refine their strategy / improve it</li> <li>• may be asked to trial their ideas with other colleagues, using approaches like lesson study</li> <li>• are supported to develop Theories of Action which will provide a documented record of the new/adjustment of existing strategy and assessment approaches for measuring its success</li> </ul>
Workshop 3 + impact: Leading the implementation of new initiatives and change, and how to know whether they made a difference	<p>Participants,</p> <ul style="list-style-type: none"> <li>• discuss the evidence from the trial and lesson studies and whether their strategies need refining</li> <li>• discuss ways of embedding change effectively in their schools and different change leadership strategies</li> </ul>
Workshop 4: Developing second round of research informed teaching approaches	<p>Participants,</p> <ul style="list-style-type: none"> <li>• repeat the processes and procedures in workshops 1 to 3 to create a new /adjust a different strategy used in the school with CIN/LAC</li> <li>• are able to change the theme they will be focusing on as part of round two</li> </ul>
Workshop 5: Other ways to test and refine	<p>Participants,</p> <ul style="list-style-type: none"> <li>• enrich their understanding and repertoire of testing and refining their teaching strategies aimed at CIN/LAC</li> </ul>

Workshop 6: Additional material on leading change	Participants, <ul style="list-style-type: none"> <li>enrich their understanding and repertoire of strategies for leading change in their school to support year 5 and 6 teachers implement effective teaching strategies for CIN/LAC</li> </ul>
Moving forward	Participants, <ul style="list-style-type: none"> <li>reflect upon what has been achieved so far and how</li> <li>working in self-organising research learning communities, are able to continue implementing the strategies as well as use the Theory of Action process learnt to create and test new strategies for CIN/LAC</li> </ul>

## Mechanisms

### Before the workshops and introductory session

- **Schools, Subject Leads and Designated Teachers identify the subject (Literacy or Mathematics) and the theme they will focus on as part of the workshops.** Both subject and theme will be chosen based on the needs of CIN/LAC in their school.
- **Support from the schools' senior leaders is secured:** Subject Leads and Designated Teachers secure the support of the senior leaders in their school, by communicating the expectations of the programme in terms of the time and resources they will require. Support is sustained for the duration of the programme and beyond. Ideally, the RLC programme would be tied into teachers' regular work assignments and even performance management targets (e.g. through CPD plans) so that it does not add too much of a burden to teacher workload. In addition, improving research literacy and learning practices among teachers should also be part of school leaders' longer-term strategic plans. Importantly, changes in school leadership may derail the success of the programme if new leaders do not have the same buy-in for the approach.

### During the workshops

- **Subject Leads and Designated Teachers attend at least 7 out of 8 workshops/sessions and are grouped based on the theme they have chosen to work on.** For an impact on pupil outcomes to occur, it is assumed that either the Subject Lead or Designated Teacher from each school attend at least 7 out of 8 of the workshops in order to ensure they are part of each key step of the intervention.
- **Subject Leads and Designated Teachers benefit from a collaborative, open, and honest environment:** For the workshops to be effective, Subject Leads and Designated Teachers must be able to collaborate and share learning with each other in an open, honest environment so that they are able to challenge each other and themselves as well as reflect on and question their practice. As such, the RLC programme is intended to create a positive and supportive workshop environment which helps foster reflective and constructive discussions. In the workshops, participants are expected to benefit from sharing the challenges they face and the strategies they develop with participants from

other schools. In this way, the RLC may create cross-school repositories of knowledge which participants can tap into, learn from, and/or use.

- **Subject Leads and Designated Teachers gain improved understanding of how to use research to inform their practice:** By consulting research evidence in a synthesised format in the workshop and through links and sources provided by facilitators, Subject Leads and Designated Teachers are expected to gain an understanding of the practical applications of research evidence to their teaching and to that of their colleagues, and how to access, interpret, and apply it.
- **Subject Leads and Designated Teachers co-develop new/adjust existing teaching strategies:** Subject Leads and Designated Teachers from each of the schools are to work closely together to interpret research evidence and contextualise it. Subject Leads are to bring their specific subject knowledge on Literacy or Mathematics, whilst Designated Teachers their insights on the background and challenges of CIN/LAC in the school. Bringing together subject specialisms with a deep understanding of the CIN/LAC in the school and their needs has the potential to further support personalised learning. New/adjusted existing strategies will be underpinned by a clear Theory of Action which will guide the development process and also support evidence gathering and impact assessment in the classroom.
- **Subject Leads and Designated Teachers gain understanding of effective change leadership.** This is intended to enable the workshop participants to effectively generate interest in and engagement of year 5 and 6 teachers with the new/adjusted existing teaching strategies they are introducing, as well as in the concept of evidence-informed action research as a source of information for developing new teaching practices.

### **Between and after the workshops**

- **Facilitators provide additional ad-hoc, 'help desk'-style support to participants,** if required, in between the workshops should, for example, a teacher require 1-1 advice on developing and implementing a particular strategy, or understanding a piece of research.
- **Subject Leads and Designated Teachers spend 8-12 hours of independent study** in between workshops reading additional literature to that discussed in the workshops to further inform and refine their strategies.
- **Subject Leads and Designated Teachers build/strengthen existing communities of practice in their schools and use change leadership techniques learned in the workshops.** Initially, it is expected that this could be through staff meetings, emails, or workshops organised by the Subject Leads and Designated Teachers. Efforts to create communities of practice will require effective information sharing, collaboration, and relationship-building driven by workshop participants.
- **Subject Leads, Designated Teachers and year 5 and 6 teachers co-develop, implement, test and refine new/adjust existing teaching strategies for CIN/LAC in their school.** Working collaboratively, workshop participants and their year 5 and 6 colleagues develop evidence-based teaching strategies and relevant classroom material that allow personalised learning for CIN/LAC in their school. Part of implementation also involves the collection of relevant pupil data and reflection upon the implementation of

strategies in action to assess the effectiveness of the strategies and improve them. This process is also expected to help generate interest in and enthusiasm for the new strategies as positive outcomes start materialising.

## Outcomes

### Primary outcomes

Improved outcomes in Reading and Mathematics are the co-primary outcomes of this evaluation, measured by the relevant national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years. Based on findings from the evaluation of RLC funded by the EEF which pointed to teachers suggesting that it may take a number of years for participation in an RLC to change teaching practice and improve pupil outcomes (Rose, et al. 2017)<sup>12</sup>, we do not expect that RLC will have a significant impact on the primary outcome in year 1.

### Secondary outcomes

Secondary outcomes relate both to pupils and teachers. For pupils, it is expected that there will be an improvement in Grammar, Punctuation, and Spelling (GPS) outcomes, also measured by the relevant national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years. Similar to the primary outcome, we expect that improvement in GPS will be difficult to detect by the end of year 1. (KS2 Writing is excluded as an outcome due to it being teacher-assessed and that it may have a lower correlation with other KS2 measures (Allen, 2016).)

In year 1, however, it is expected that the intervention is more likely to affect secondary outcomes relating to teachers. Teacher outcomes centre on improvements in workshop participants’:

- **Knowledge** of academic/action research specifically relating to CIN/LAC;
- **Attitudes** towards the usefulness of academic/action research to enhance teaching strategies for CIN/LAC; and
- **Behaviours** relating to the use of academic/action research in the development of new teaching strategies, and the implementation of improved teaching practices tailored to the needs of CIN/LAC in their school.

To assess the above outcomes, we will use and adapt a questionnaire developed by the National Foundation for Educational Research (NFER) which was used in the previous RCT of the RLC programme (Nelson et al., 2017). The NFER questionnaire assessed teachers’:

- Positive disposition to academic research in informing teacher practice
- Use of academic research to inform selection of teaching approaches
- Increased perception that academic research is useful to teaching
- Increased perception that own school encourages use of academic research
- Active engagement with online evidence platforms
- Improved research knowledge

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<sup>12</sup> The evaluation was funded by the Education Endowment Foundation (EEF) the Department for Education (DfE) and the Mayor’s London Schools Excellence Fund as part of a round of funding to explore research use in schools.

Additionally, it is expected that both workshop participants as well as year 5 and 6 teachers will co-develop and implement improved teaching practices for CIN/LAC. As part of this process, Subject Leads, Designated Teachers and year 5 and 6 teachers will become more confident developing and trialling new practices for CIN/LAC based on evidence and the Theory of Action learned in the workshops. Thus, the RLC programme is designed to help produce a wider change in attitudes and behaviours for year 5 and 6 teachers. It is assumed that the more sustained the application of effective the new/adjustment of existing teaching strategies for CIN/LAC, and of the Theory of Action within teacher communities, the greater the impacts on pupil attainment over time.

## Unintended consequences

As a novel intervention driven by (carefully planned) experimentation, possible unintended outcomes may result from new/adjusted teaching strategies being ineffective and having an adverse effect on pupil learning outcomes. There is a risk that the literature is misinterpreted or misapplied, such that teaching strategies do not align with the literature itself. Additionally, there is a risk that evidence from research that has been conducted in a general school setting is applied ineffectively to CIN/LAC. A meta-analysis conducted by the WWCS and of previous EEF trials found that different interventions were effective for children who had a social worker compared to all children on average, suggesting that CIN may require different educational interventions than their peers (Sanders et al, 2020).

# Impact Evaluation

## Research questions

The questions to be answered by the impact evaluation include:

### Primary outcomes

- What is the impact of RLC on Reading and Mathematics attainment as measured by the corresponding national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years in intervention schools compared with year 6 CIN/LAC over the last 6 years in control schools?

### Secondary outcomes

- What is the impact of RLC on Grammar, Punctuation, and Spelling attainment as measured by the relevant national curriculum tests at KS2 for year 6 CIN/LAC over the last 6 years in intervention schools compared with year 6 CIN/LAC over the last 6 years in control schools?
- What is the impact of RLC on teachers' knowledge of academic/action research and use of academic/action research in their teaching practices as measured by the teacher questionnaire for Subject Leads and Designated Teachers in the intervention schools compared with Subject Leads and Designated Teachers in control schools?
- What is the impact of RLC on teachers' attitudes towards academic/action research and implementation of improved teaching practices for CIN/LAC as measured by the teacher questionnaire for Subject Leads, Designated Teachers, and year 5 and 6 teachers in intervention schools compared with Subject Leads, Designated Teachers, and year 5 and 6 teachers in control schools?

The reason for having two primary outcomes is that schools can choose the subject area they focus on in RLC workshops (either Literacy or Mathematics). We expect to find a stronger impact on pupils' performance in the subject that schools have chosen as the focus for their workshops. However, performance in both subjects will be tested for all schools, regardless of the subject chosen. From a technical perspective, this approach is required to maintain the integrity of the randomised approach which would be compromised by creating analytic subsets through filtering based on school self-selection into preferred subject groups. Additionally, within their chosen subject area (Literacy or Mathematics), schools will have the flexibility to choose focus topics and change workshop topics in the second RLC cycle in the second half of the year (January – March). Learning in these topics may result in transferrable improvements in other subjects (e.g. improvements in pupils' metacognition could result in improved attainment outcomes across several subject areas). The transferability of learning improvements in different subject areas will be further examined in the exploratory analysis, discussed below. The choice of topic will not have a bearing on the measurement of outcomes for Subject Leads and Designated Teachers: questions on research knowledge will be relevant for all Subject Leads and Designated Teachers, as they relate to the application of research methods and academic/action research in general, and not to the specific topic of the workshops they attended.

## Design

Table 2: Trial design

Trial type and number of arms		Non-blinded two-armed cluster-randomised control trial
Unit of randomisation		School
Stratification variables (if applicable)		Overall, 12 strata will be constructed (one per each Virtual School and a further 2-group breakdown within each LA).
Primary outcome	variable	KS2 Scaled Score in Reading
	measure (instrument, scale)	Continuous variable, ranging between 80 to 120 (DfE, 2019)
	variable	KS2 Scaled Score in Mathematics
	measure (instrument, scale)	Continuous variable, ranging between 80 to 120
Secondary outcome(s)	variable(s)	KS2 Scaled Score Grammar, Punctuation and Spelling (single measure)
	measure(s) (instrument, scale)	Continuous variable, ranging between 80 to 120
	variable(s)	Teacher knowledge of academic/action research
	measure(s)	A Rasch logit measure of teacher ability based on 18 knowledge items in the section “Your knowledge about academic and action research” of the teacher questionnaire
	variable(s)	Teacher attitudes towards academic/action research
	measure(s)	3 correlated Rasch logit measures of attitudes towards academic/action research, based on a multidimensional Partial Credit model <sup>13</sup>
	variable(s)	Teacher use of academic/action research in teaching practice
	measure(s)	2 correlated Rasch logit measures of use of academic/action research in practice, based on a multidimensional Partial Credit model
	variable(s)	Teacher implementation of improved teaching practices for CIN/LAC
measure(s)	A correlated Rasch logit measure of implementation of improved teaching practices for	

<sup>13</sup> The number of correlated Rasch logit measures for each of the above outcomes could differ depending upon the factor analysis of the data and will be revisited at the analysis stage.

## Randomisation

The unit of randomisation will be the school, as this is a school-level intervention. A total of 240 schools are expected to be recruited in the trial, with 40 from each of the LAs. We anticipate that a complete list of participant schools will be available prior to allocation, i.e. a stock sample with no inflow over the observation period. We will ensure that workshop caseloads are distributed appropriately across different locations. Hence, we will include the virtual school/LA location as a stratification/blocking factor in the allocation design. Stratification can improve the power of the design, as well as having logistical purposes, when allocation is undertaken within strata defined by school characteristics correlated with the outcomes.

Further criteria which will be considered for stratification/ blocking are:

- Size of school
- Attainment in KS2
- Percentage of pupils eligible for free school meals (FSM).

An objective is to ensure that equal numbers of treatment and control group schools are assigned within each stratum. With 40 schools available for stratification within each LA, this gives 20 schools in treatment and 20 schools in control. We anticipate breaking this down by another stratification characteristic to result in 10 intervention schools and 10 control schools in each minor stratum defined as a cross-tabulation of LA and one of the other school characteristics. We will explore the extent of variation between the schools on each of the characteristics once we have received the complete list of participant schools and select the most appropriate candidate variable.

We will check for balance between the two trial arm groups using KS1 results, where applicable and teacher responses to the baseline questionnaire. Balance will also be considered in terms of other relevant data such as pupils' gender, ethnicity, date of birth, FSM, first language, Special Educational Needs (SEN), CIN/ LAC status. These variables will be available for data linkage from the NPD. Any significant imbalances which are found will be adjusted for in regression models as part of the sensitivity analysis.

## Participants

The first unit of recruitment will be the virtual school. Virtual schools are responsible for identifying eligible primary schools. To be eligible, primary schools need to currently have enrolled a CIN/LAC in year 6, under the categories included as per the definition of CIN/LAC included in the Intervention section, at any point the last 6 years (2015 – 2021).

## Sample size / MDES calculations

Table 3: Sample size/ MDES calculations

		MDES (Proportion of a Standard Deviation)
MDES for children outcomes		0.19
MDES for teachers' outcomes		0.17
Proportion of variance in outcome explained by covariates <sup>14</sup> (R <sup>2</sup> ) – Children outcomes/Teachers' outcomes	Children	0.4
	Teachers	0.4
	Virtual schools	NA
Intracluster correlations (ICCs) – Children outcomes/Teachers' outcomes	School	0.1
	Teachers	NA
	Virtual schools	NA
Alpha		0.05
Power		0.8
One-sided or two-sided?		Two-sided
Level of intervention clustering		School
Average cluster size		3
Sample Size (children)	Intervention	360
	Control	360
	<b>Total</b>	720
Sample Size (teachers)	Intervention	720
	Control	720
	<b>Total</b>	1440

### Explanation

Since recruitment has not yet been completed, sample size calculations have been made using estimations based on publicly available data on pupils and teachers.

### School and pupil sample calculations and MDES calculation

Current recruitment efforts by the WWCS suggest that the recruitment of 240 eligible schools might be possible. Assuming three eligible pupils in each school, there will be 720 CIN/ LAC across the six virtual schools expected to be recruited to participate in the

<sup>14</sup> We assume the same percentage of variance is accounted for by covariates in the model for teacher outcomes and children outcomes. Covariates refer mainly to baseline outcome measures.

intervention. With randomisation of schools within virtual schools, there will be approximately 20 schools in each LA in the treatment condition and 20 in the control.

Based on these assumptions, we have performed a power analysis using the PowerUp tool, as recommended by the EEF, to estimate the minimum detectable effect size (MDES)<sup>15</sup> for CIN/ LAC outcomes. Our calculations assume a two-tailed Type I error rate of 0.05 and statistical power of 0.8. We have also assumed baseline measures to account for 40% of the primary pupil level outcome variance and stratification/ blocking for a further 10% of variance and an intra-cluster correlation (ICC) of 0.1. This yields an estimated MDES of 0.19.

### **Teacher sample calculations and MDES calculation**

For teacher outcomes, we estimate that there will be around four full time teachers per school. The data we are using to estimate this includes both school leaders and classroom teachers as part of the total number of teachers and therefore on average we expect a total of four full time teachers combined per school. Assuming the same parameters as above for power calculations, we obtain a MDES of 0.17.

## **Outcome measures**

### **Primary outcome measures**

Drawn from the NPD, Reading and Mathematics scores at KS2 for CIN/ LAC will be co-primary outcomes. KS1 scores will be used as baseline outcome measurements for Reading and Mathematics. KS1 baseline data for Reading and Mathematics is included

within the KS2 dataset as KS2\_KS1READPS and KS2\_KS1MATPS. The KS2 scaled scores range from 80 to 120, while the KS1 scores range from 85 to 115 (Standards and Testing Agency, 2019).

### **Secondary outcome measures**

Pupils scores on Grammar, Punctuation and Spelling (GPS) at KS2 (KS2\_GPSMRK) will be analysed as a single measure secondary outcome. A corresponding KS1 variable is not available for GPS and thus cannot be used as a baseline.

Teachers' outcomes will also be analysed as secondary outcomes. We will circulate baseline and endline questionnaires to Subject Leads, Designated Teachers and year 5 and 6 teachers at the start of the intervention, prior to the first 'Introductory' session, and at the end of the intervention, after the final 'Moving Forward' session. Questionnaires will be developed and administered online and disseminated using email addresses available on the DfE's Get Information About Schools (GIAS) database or using teacher email addresses provided by Head Teachers in consent forms administered as part of the recruitment process.

We will use and adapt as appropriate a questionnaire developed by Nelson et al., (2017) (and which has been used in EEF evaluations relating to the use of research evidence in

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<sup>15</sup> We use the 'BCRA3\_2F design, which assumes three levels, with the third level fixed for stratification/blocking and a random level 2 effect, with 3 pupils per school, 40 schools per block and 6 blocks = 720 pupils; with 20 schools per block allocated to treatment and 20 schools per block to control.

teaching practice). Teacher outcomes will include teachers' research knowledge, their attitudes towards academic/action research, their use of academic/action research in teaching practice, and their implementation of improved teaching practices for CIN/LAC.

The structural relationship between outcomes and questions will be checked using factor analysis, with analysis guided by the results of the *Measuring Teachers' Research Engagement: Findings from a pilot study* (Nelson, et al., 2017). Scale reliability analysis will be reported. We assume here that the scaling structure of the original investigation will be replicated in our research and describe our intended analysis on this basis in this document. However, upon data collection, we will initially check that the dimensions and question loadings which emerges from our data replicate the previous report using confirmatory factor analysis. If the results of the factor analysis do not support our outcomes framework, subsequent modifications and refinements will be made using exploratory and confirmatory factor analysis. Cronbach's  $\alpha$  measures on internal reliability will also be calculated for each scale.

## Analysis plan

### Primary analysis

Pupils' outcomes will be measured through the NPD variables KS2\_READSCORE and KS2\_MATSCORE. Based on the publicly available information in the NPD database this is provided as a scaled measure. The data used for this analysis will have a hierarchical structure, as pupils and teachers are nested in schools. The analysis will take the clustering from the hierarchical structure of the data into account by using a robust regression model for clustered errors approach.

The cluster regression model (CRM) specification for KS2 Reading score is:

$$KS2\_READSCORE_{ij} = \beta_0 + \beta_1 Treat_j + \beta_2 KS1\_READSCORE_{ij} + \sum_{s=1}^{11} \gamma_s stratum_s + \epsilon_{ij} \quad (1)$$

Where:

$Treat_j$  is equal to 1 for intervention schools, 0 for control schools

$KS1\_READSCORE_{ij}$  is the baseline Reading score (for KS1) for pupil i, in school j

$stratum_s$  is a stratum indicator (equal to 1 if the school is stratum s, 0 otherwise)

$\epsilon_{ij}$  is the cluster adjusted component of the error term

The  $\beta$  terms are regression coefficients (with  $\beta_0$  being the intercept). The coefficient on the treatment variable,  $\beta_1$ , is the effect of the treatment on KS2 children Reading score.

The CRM specification for KS2 Mathematics score is:

$$KS2\_MATSCORE_{ij} = \beta_0 + \beta_1 Treat_j + \beta_2 KS1\_MATSCORE_{ij} + \sum_{s=1}^{11} \gamma_s stratum_s + \epsilon_{ij} \quad (2)$$

Where all variables and coefficients have the same meaning as above.

The impact estimator will be calculated using an intention to treat (ITT) analysis to maintain the integrity of randomisation in the allocation stage. This is the fundamental test of the success of the impact effect for this study. This ITT, however, is based on an 'offer to treat'. It is possible that some schools in the treatment group will have agreed to participate but teachers do not attend the workshops, in effect receiving no treatment and contributing zero to the ITT impact effect. In such circumstances, where we have outcome data, we can estimate a second impact estimator based on those who have participated using formula (3) below, which will be greater than or equal to the ITT. We anticipate it is extremely unlikely that some people in the control group will receive treatment but provide formula (4) below to show how we would deal with this situation, should it arise. Formula (3) below shows how we will adjust for this circumstance of dual crossovers, where the local average treatment effect is calculated as a weighted average of treatment compliers across the treatment and control groups.

In order to adjust for the presence of non-compliers in the treatment group, and assuming we can collect outcome scores for these people, we will also calculate the treatment on the treated, following equation 8 in Bloom (2006), as:

$$ITT = \frac{\bar{Y}_t - \bar{Y}_c}{\bar{D}|Z=1} \quad (3)$$

Where the denominator is the proportion receiving treatment in the treatment group.

Whilst not expected in this design, in the case where there are cross-overs from the control group to the treatment group, we will also include an estimate of the Local Average Treatment Effect (LATE), also described by Bloom (2006; equation 11):

$$LATE = \frac{\bar{Y}_t - \bar{Y}_c}{(\bar{D}|Z=1) - (\bar{D}|Z=0)} \quad (4)$$

Where the denominator is the difference in treatment rate between the treatment and control group.

In addition to the estimators described above, we will provide a standardised impact effect, taking account of the multilevel structure of the data.

With only two primary outcome variables, in line with WWCS recommendations, there will be no adjustments for multiple significance testing.

## Secondary analysis - Pupil outcomes

The analysis of year 6 CIN/ LAC pupils' secondary outcomes will resemble the analysis of the primary outcomes. Similarly to Reading and Mathematics, the GPS variable (a synthesis of the KS2 Grammar, Punctuation, and Spelling ability of students) is both numeric and reliable (based on the National Curriculum KS2 assessments). As a result, the specification for the GPS pupil outcome is:

The CRM specification for KS2 GPS is:

$$KS2\_GPS_{ij} = \beta_0 + \beta_1 Treat_j + \sum_{s=1}^{11} \gamma_s stratum_s + \varepsilon_{ij} \quad (5)$$

Where all variables and coefficients have the same meaning as in the primary analysis.

The KS2 Literacy and Mathematics pupil data from the NPD are valid and reliable measures of pupil ability based on high-quality assessments of the National Curriculum.

### Secondary analysis - Teacher outcomes

There are four secondary teacher outcomes, each with three teacher subgroups of interest, in addition to the pupil secondary outcome. Three of the teacher outcomes are attitudinal and one is knowledge based. Ideally, the three attitudinal outcomes would be treated within a single three-level multi-level model (MLM), corresponding to a MANCOVA with outcomes nested within teachers, nested within schools; but current WWCS guidelines discourage use of MLMs. Consequently, we propose a separate CRM, as outlined above for each teacher secondary outcome.

WWCS guidelines require adjustments to significance tests given the number of outcomes included here. Our proposal is to run an omnibus null model (combining all teachers into a single treatment group) for each outcome, with further pair-wise testing of teacher subgroup effects only with a rejection of the omnibus null. Hochberg adjustments are proposed such that the five outcomes have their omnibus null tests included in the Hochberg procedure, i.e. an adjustment for five significance tests. Pairwise testing is also adjusted, using the Hochberg approach, separately for each outcome which is significant from the omnibus null test, i.e. a maximum of three tests is used in the Hochberg procedure for each significant outcome.

The analysis of teacher outcomes includes three potential groups of interest:

- Subject Leads
- Designated Teachers
- Years 5 and 6 teachers.

Each of these groups can be identified in both the treatment and control groups.

Data from all three teacher groups will be pooled into a single dataset. The structural form of the model will follow that described in (1), (2) and (5) above, albeit with an extra set of coefficients to identify the teacher group status. The test of any significant difference across all teacher groups will be undertaken using the coefficient of the trial group indicator status. If this overall treatment effect is significant, interaction terms between the treatment group and the teacher group will be added to the model. These interaction terms will test whether the size and direction of the impact differs between teacher groups, although power to detect sub-group effects will be limited by small sample sizes. With three teacher groups, there are three pairwise tests to compute, i.e. each group against the other. We propose to use a Hochberg adjustment for multiple testing on these three post-hoc tests, which will only be undertaken if the overall omnibus null hypothesis is rejected. The CRM will also include baseline measure scores and stratum indicators.

$$TeacherAttOutcomes_{ij} = \beta_0 + \beta_1 Treat_j + \beta_2 BaselineOutcomes_{ij} + \beta_3 TeacherGroup_{SL} + \beta_4 TeacherGroup_D$$

Where

$BaselineOutcomes_{ij}$  are the baseline outcomes for each teacher-outcome combination;  $TeacherGroup_{SL}$  and  $TeacherGroup_{DT}$  are dummy variables for the subject leader and designated teacher effects (vs the subject teachers which is the reference category).

The teacher outcomes are ordinal (teachers respond to Likert-type items in the questionnaire) or dichotomous data (where teacher responses to items are scored as correct/incorrect). As a result, the teacher outcome variables may need to be analysed using different models compared to the pupil outcome variables. The regression framework will use the appropriate canonical link and error term appropriate to the measurement level of the outcome.

We propose to use different models for the construction of teacher knowledge and the teacher attitudes outcome measures.

In the knowledge part of the questionnaire, teacher responses to question items are scored as correct/ incorrect. We suggest using standard psychometric techniques to compute a knowledge measure for each of the participants, both at baseline and at end point. The family of Rasch models is typically used (very widely) in education and other related disciplines to assess knowledge. The simple Rasch model (Lamprianou, 2019, chapter 3) is appropriate for dichotomously scored items. The model often formulated as

$$P_{ni}(x_{ni} = 1 | \theta_n, \delta_i) = \frac{e^{\theta_n - \delta_i}}{1 + e^{\theta_n - \delta_i}} \quad (6)$$

Where  $e$  is a mathematical constant approximately equal to 2.72. It is assumed that item  $i$  is dichotomously scored: 1 represents a correct response, whereas 0 represents an incorrect response. We use subscripts to indicate that the Rasch formula is generic and refers to any teacher of a specific ability  $\theta$  and any item of a specific difficulty  $\delta$ . For example, we use  $\theta_n$  to refer to the knowledge of any teacher  $n$ , and  $\delta_i$  to refer to the difficulty of any test item  $i$ . We assume that the only factors that affect the probability for a correct response are the knowledge-of the teacher and the difficulty of the item. This hugely simplifies our task to model the probability for a correct response. Indeed, one of the virtues of the Rasch model is that it is relatively simple, compared with similar models, thus adhering to the principle of parsimony. For each teacher, we will compute  $\theta_n$  to represent their research knowledge. Standard errors will be computed based on Wright and Stone (1979, p.135).

All analysis will be applied using open-source packages in R and will be fully replicable; code can be provided to the client. For the Rasch analysis, the usual dimensionality and robustness checks will be conducted (see Lamprianou, 2019; chapter 3 'Expectations and Residuals').

Once the Rasch knowledge-estimates of each teacher (baseline and end of year) are computed, they will be used in a CRM to estimate the treatment effect, similarly to the models for the primary outcomes.

The CRM specification for teacher knowledge is:

$$Teach\_Knowl_{ij} = \beta_0 + \beta_1 Treat_j + \beta_2 Baseline\_Knowl_{ij} + \sum_{s=1}^{11} \beta_{s+2} stratum_s + \varepsilon_{ij} \quad (7)$$

As for teachers' attitudes outcome measures, we have to consider that the dimensionality of the questionnaire (i.e., the existence of five attitudinal teacher outcomes) is based on the outcome of the pilot study (Nelson et al., 2017). In that study, the researchers used an exploratory factor analysis to pull together the different teacher outcomes from different sections of the questionnaire. As our study will be based on a different sample, we cannot be sure that a factor analysis on our data will replicate the findings of Nelson et al. (2017). Thus, before conducting any formal testing on the attitudinal teacher outcomes, we will need a factor analysis to confirm the structure of the data. To account for the ordinal nature of the data, we propose using robust covariance matrices with polychoric correlations (for the Likert-scaled items) using the 'psych' (Revelle, 2020) open-source software on R for purposes of replicability). Cronbach's alpha based on tetrachoric and polychoric correlations will be reported per scale. Wayne Velicer's Minimum Average Partial (MAP) criterion (Velicer, 1976) and Parallel analysis will be used to decide on the number of factors to extract. Oblimin rotation will be used to account for the correlation between factors (we expect attitudes to be correlated). We will use the outcome of our factor analysis, even if this is different to the hypothesized five-dimensional structure reported by the evaluation study.

Our working assumption is that we will recover five correlated dimensions from the data as per evaluation study. The appropriate model is a multi-dimensional Partial Credit Rasch model, in order to compute one teacher estimate per dimension per teacher. The analysis will be done by the open-source TAM package (Robitzsch et al., 2021) where the items of each dimension will be modelled on a different – but correlated - measurement scale. The extracted teacher Rasch logit per dimension will be used to test for treatment effects in a MANCOVA model with treatment and strata as fixed effects.

## **Analysis of Harms**

In order to analyse the possibility of adverse effects resulting from the RLC programme, we will be guided by Lorenc and Oliver's (2014) taxonomy of harms which identifies five types of potential harms:

- Direct
- Psychological
- Equity
- Group and social
- Opportunity cost.

It is not expected that the intervention will result in any of the above harms to beneficiaries or wider stakeholders (unintended consequences of the intervention, including harms, will be explored in the IPE).

## **Exploratory Analysis**

Before formal statistical modelling, we plan to report a number of tables and figures with descriptive statistics. For numeric variables, for both the pupil and the teacher samples, descriptive statistics (means, standard deviations, and quartiles) and accompanying visual aids (boxplots and histograms) will be used to present the data to the reader. Descriptive statistics and graphs will be produced for the whole sample (separately for pupil and teacher

samples), but also per group (ITT groups and stratum). Descriptive statistics are important to provide the necessary nuance to readers who may be less interested in formal statistical modelling.

The degree of compliance is important. As one might expect, in empirical settings we could expect a number of teachers not to be full compliers. For purposes of analysis, we will consider teachers as either being full compliers or non-compliers (no partial compliance will be considered). Considering a single absence as non-compliance appears strict; arguably, a teacher who attends seven workshops would be expected to demonstrate significant gains compared to the teachers of the control group. We will consider as non-compliers only the pairs of teachers (Designated Teacher and Subject Lead) who both miss more than one workshop; all other teachers will be considered as full compliers.

In the section of the analysis of the primary outcomes, we described an ITT and TT procedures to account for non-compliance. However, before computing and reporting ITT and TT, we suggest profiling intervention schools and virtual schools by their extent of compliance, comparing descriptively some of their main background and performance data, and if in doubt, undertaking qualitative investigation to find out why they did not comply. This may be important for the interpretation of the effects and the validity of ITT and TT indices.

Regarding compliance, we propose monitoring our data for widespread partial compliance. If we observe that more than 10% of teachers demonstrate varying degrees of compliance (i.e., teachers tend to make several absences), we suggest fitting a more nuanced model for the primary outcomes, aiming to estimate 'dosage' effects. We propose to investigate the dataset for partial compliers. As the treatment of partial compliers can be very complicated (Van der Windt, 2014), we propose to convert the  $Treat_j$  variable (Models 1-4) to a numeric variable, indicating the degree of compliance for every school, as a proportion of sessions attended by teachers. E.g. for school  $j$  with two teachers, who between them have attended 4 workshops (out of 6 workshops), partial compliance is  $Treat_j = 1 - 4 / (2 * 6) = 0.66$ . Essentially, it would be similar to investigating different degrees of exposure, or different dosage in a medical experiment (although compliance here is subject to self-selection, which means that we cannot be sure that dosage per se is responsible for any impact on the outcome).

The fact that the schools can choose the subject of the workshop may pose some problems for the identification of the impact, if the choice is influenced by the potential outcome achieved by the school. For instance, schools may be more likely to choose a subject where they know performance of CIN/LAC is worse. In this case, we may not see large differences between treatment and control schools because intervention schools start from a significantly disadvantaged situation than the intervention ones. Controlling for baseline outcomes will partly mitigate for this effect. However, as part of the exploratory analysis, we will check whether school choice is related to past performance, based on administrative data collected from the schools. We will compare descriptive statistics (means and standard deviations) on Literacy and Mathematics for schools which chose to focus on either of the subjects. In addition, we will also employ formal hypothesis testing. Although the impact of the treatment on Literacy and Mathematics scores will be tested for all schools in the analysis of Models 1-3, independently of the chosen subject of the workshop (following the requirements to maintain the integrity of randomisation) it is reasonable to expect stronger impacts on pupil outcomes in the subject chosen by the school. We propose to fit alternative CRM models by replacing the dichotomous treatment variable ( $Treat_j$ ), described in the above models, with another variable which takes three values (1:control group, 2:intervention focusing on Literacy, 3:intervention focusing on Mathematics). The coefficient

of each of the dummy variables for the intervention groups (the control group will be the reference variable) will indicate whether focusing on a specific subject has an increased impact on pupil performance in that particular subject. Again, these models include the self-selection of schools to subject which means that the results of these models are less robust than the ITT analysis of primary outcomes. As regards the selection of subthemes within the subjects, we will consider how the analysis will be conducted after the schools have made their choices after the beginning of the programme. Initially, we anticipate multinomial logistic models to identify which themes are chosen but will review the most appropriate way to construct the choices data after inspection of the choice outcomes.

Finally, a set of socio-demographic variables and other variables (collected from NPD and from the administrative data provided from the schools) will be included in extended impact regression models to test for differences in the impact found. These variables will be aggregated at the school level, which may increase the power of the analysis and also help to smooth out any chance of imbalances in the distribution of the characteristics of the treatment and control groups, should this arise. These covariates will include: percentage of pupils in a given age category, percentage of male and female pupils, percentage of pupils by ethnicity, percentage of pupils with English as a first language, percentage of SEN and percentage of FSM in the current year.

For teacher analysis we will use the following individual-level covariates:

- teacher status (classroom teacher, middle leader (such as head of department, subject, or curriculum subject area leader); senior leader (deputy or assistant headteacher); headteacher, principal or director; SEN teacher; supply, cover or Planning, Preparation and Assessment (PPA) teacher; high level teaching assistant)
- teaching experience
- years teaching in the school
- whether the respondent holds a postgraduate qualification.

We note that analysis of exploratory outcomes will not be included in the multiple test adjustments for the primary and secondary outcomes. However, we will provide naïve and adjusted significance tests levels for the exploratory models, treating these as a separate block of analysis.

### Missing data policy

Missing data can reduce statistical power through reducing sample size and introduce bias into the impact estimator if data loss is not independent of treatment assignment. Our principal concern is with missing outcome data as this will make the most difference to our ability to accurately estimate the impact.

Analysis of pupil outcomes is undertaken on NPD administrative outcomes, which, in theory, should be complete. Teacher outcomes are based on self-reported questionnaire data and there is a greater potential for incomplete data both at unit (teacher) and (questionnaire) item level.

### Outcome data

Outcome data are critical for the impact evaluation and, as such, we do not propose to impute missing data for them. If missing data constitute less than 5% of the data for an

outcome, listwise deletion will occur, with no further adjustment. We propose to accept a threshold of 5% missing data for a complete case analysis on the remaining 95% of the sample. Though this 5% threshold is somewhat arbitrary, it is reasonable to expect any bias arising from this low level of missingness to be low to negligible. It also represents a comparatively small decrease in the precision of the impact estimator.

Where data loss exceeds 5% for outcomes, we will create a binary indicator distinguishing missing from not missing and check for a significant difference in missingness between treatment and control groups using a logistic model including the covariates listed above. If there are no significant coefficients in the model, the data will be considered missing completely at random. If any characteristics are significantly associated with the propensity for missingness a weight will be created and the primary and secondary analysis will be re-run with a weight included in the models with the standard errors adjusted appropriately for the weight, to ensure appropriate significance testing the treatment effect.

### **Baseline and covariate data**

For levels of missing baseline and covariate data under 10%, we propose to add a missingness indicator to the covariate coding. For levels of missingness, of 10% or greater, multiple imputation is proposed using the MICE package in R, Van Buuren and Groothuis-Oudshoorn (2011). The practical details of the imputation will have to be decided at the time of analysis as the extent of the missing data and the actual variables with the missing data may affect the imputation approach.

## Implementation and process evaluation

### Aims

The implementation and process evaluation (IPE) will explain the impact of the RLC programme on teachers and CIN/LAC Reading and Mathematics outcomes and enhance the evidence base on effective implementation of the RLC as well as other programmes of a similar nature.

### Research questions

The evaluation will answer the following questions:

1. What are the reasons behind the outcomes identified in the RCT?
2. What, how and to what extent external factors, context, internal programme features, and different stakeholders influence the delivery and outcomes of the RLC programme?
3. What are the critical factors of implementation, especially at a school level, that support improvements in teacher and pupil outcomes and those that hinder it?

### Design and methods

The IPE will use realistic evaluation principles in order to build a comprehensive evidence base on what works, for whom, in what circumstances and why. The evaluation will be guided by Humphrey et al.'s (2016) framework and will employ a mixed methods approach involving:

- A pre and post-intervention questionnaire;
- Workshop observations; and
- Case studies with intervention and control schools.

A detailed description of the methods and indicators to be used using Humphrey's framework is presented in the table below.

## Design and Methods: Research Framework

Table 4: Evaluation research framework

Evaluation questions	Indicators or outputs	Methods
<b>Fidelity</b>		
<ul style="list-style-type: none"> <li>• What is teachers' attendance to the RLC programme workshops?</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance rate of Subject Leads and Designated Teachers</li> <li>• Number of workshops delivered against original plan</li> </ul>	<ul style="list-style-type: none"> <li>• Session and teacher attendance data collected by the delivery team</li> </ul>
<b>Dosage</b>		
<ul style="list-style-type: none"> <li>• Is the implementation of the RLC programme consistent with its design?</li> <li>• What are Subject Leads and Designated Teachers views of the frequency, timing, and duration of the workshops?</li> <li>• To what extent are Subject Leads and Designated Teachers able to study independently?</li> </ul>	<ul style="list-style-type: none"> <li>• Adherence of workshops to workshop agenda and RLC cycle of inquiry</li> <li>• Perceived suitability of workshops' frequency, timing, and workshop duration by Subject Leads and Designated Teachers</li> <li>• Perceived significance of the RLC approach and of the new/adapted strategies for CIN/LAC compared to previous approaches/strategies</li> <li>• Understanding of factors influencing dosage, including support of school leadership; time and resources/costs to participation; hours of independent study</li> </ul>	<ul style="list-style-type: none"> <li>• Interviews with the delivery team</li> <li>• Pre and post teacher questionnaire</li> <li>• Workshop observations</li> <li>• Case studies</li> </ul>

<ul style="list-style-type: none"> <li>• To what extent do Subject Leads and Designated Teachers collaborate with year 5 and 6 teachers to co-develop and implement Theories of Action in their schools?</li> </ul>		
<b>Quality</b>		
<ul style="list-style-type: none"> <li>• What are the views of Subject Leads and Designated Teachers on the quality of workshop content, structure, support, and environment (or the space created for collaboration and open and honest conversations)?</li> <li>• Do different stakeholders believe that the programme is addressing their requirements and the outcomes needed to be achieved?</li> <li>• How does the RLC and the role of Subject Leads</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived quality and relevance of workshop content and activities, facilitation, and facilitator support as well as of collaboration and participation among participants</li> <li>• Proportion of Subject Leads and Designated Teachers who develop Theories of Action as per the RLC workshop guidance materials</li> <li>• Description of approaches to co-developing and implementing relevant academic literature and the Theory of Action cycle by Subject Leads, Designated Teachers, and year 5 and 6 teachers</li> <li>• Perceived barriers and enablers to the programme and schools' implementation, and to achieving better Reading and Mathematics outcomes for CIN/LAC</li> <li>• Perceived benefits of the programme on CIN/LAC Reading and Mathematics outcomes compared to other pupil groups that need more tailored support</li> </ul>	<ul style="list-style-type: none"> <li>• Pre and post teacher questionnaire</li> <li>• Workshop observations</li> <li>• Case studies</li> </ul>

<p>and/or Designated Teachers work in practice? And how does this enactment differs based on different school contexts?</p> <ul style="list-style-type: none"> <li>• What supports and what inhibits effective implementation at a programme and school levels and why?</li> <li>• What can be improved?</li> <li>• How do RLC schools compare to control schools?</li> </ul>	<ul style="list-style-type: none"> <li>• Suggested improvements for the RLC programme and school level implementation based on context and circumstances reported by Subject Leads, Designated Teachers, and year 5 and 6 teachers</li> <li>• Differences in practices and perceived outcomes across treatment and control schools</li> </ul>	
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**Responsiveness**

<ul style="list-style-type: none"> <li>• How do Subject Leads, Designated Teachers and year 5 and 6 teachers expect the RLC programme to impact on their and school practices and on CIN/LAC outcomes? Any unintended impacts?</li> <li>• What are the necessary pre-requisites for the use of research to change teachers' practice and</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived expectations and concerns regarding the RLC approach</li> <li>• Understanding of the support offered by school leadership, time, and resources to participate</li> <li>• Contextual, environmental, and external factors that influence decisions on the approach, processes, and outcomes</li> <li>• Exploration of new teaching strategies implemented and their effectiveness, including enablers and barriers to what appears to 'work'</li> <li>• Discussion of wider changes in school culture/community (if any)</li> </ul>	<ul style="list-style-type: none"> <li>• Case studies</li> </ul>
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<p>how are the manifested at a school level?</p> <ul style="list-style-type: none"> <li>• What are the characteristics and practices employed by schools where the RLC programme and the role of Subject Leads and/or Designated Teachers is perceived to be effective?</li> <li>• How do RLC schools compare to control schools?</li> </ul>	<ul style="list-style-type: none"> <li>• Differences between intervention and control schools</li> </ul>	
Research question	Indicators or outputs	Methods
Reach		
<ul style="list-style-type: none"> <li>• How attractive is the idea of the RLC programme to schools?</li> <li>• To what extent do schools engage with the programme and use the resources provided in the workshops?</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived acceptability, relevance, and usefulness of the RLC programme as a whole school approach to improving outcomes for CIN/LAC</li> <li>• Belief that the RLC approaches to developing teaching strategies for CIN/LAC are sustainable beyond the end of the programme</li> <li>• Perceived quality of engagement, participation, and collaboration in the workshops by Subject Leads and Designated Teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Pre and post teacher questionnaire</li> <li>• Case studies</li> </ul>

	<ul style="list-style-type: none"> <li>Year 5 and 6 teachers reached and beyond (if any) and perceptions of the level of use of the resources provided in the RLC workshops</li> </ul>	
<b>Research question</b>	<b>Indicators or outputs</b>	<b>Methods</b>
<b>Service orientation</b>		
<ul style="list-style-type: none"> <li>To what extent is the RLC programme genuinely new and innovative?</li> <li>Does the RLC programme offer support in ways not previously offered?</li> </ul>	<ul style="list-style-type: none"> <li>Comparison with similar activities previously implemented or ongoing in schools relating to teaching strategies for CIN/LAC</li> <li>Comparison of the perceived benefits of the RLC programme compared to previous practices relating to teaching CIN/LAC in the schools</li> </ul>	<ul style="list-style-type: none"> <li>Pre and post teacher questionnaire</li> <li>Case studies</li> </ul>
<b>Adaptation</b>		
<ul style="list-style-type: none"> <li>Has implementation diverged from its initial design?</li> <li>What is the nature of these adaptations and reasons, including: a) how well is the RLC programme adapted to support outcomes for CIN/LAC; and b) how well Subject Leads and Designated Teachers</li> </ul>	<ul style="list-style-type: none"> <li>Explanation of the reasons behind key adaptations to the RLC programme focusing on CIN/LAC compared to its previous versions</li> <li>Perceived feasibility of delivering the role of the Subject Lead and of the Designated Teachers as required by the RLC programme</li> <li>Perceived benefits and drawbacks of these adaptations</li> </ul>	<ul style="list-style-type: none"> <li>Interviews with delivery team</li> <li>Case studies</li> </ul>

adapt their roles to suit the needs of the programme?

- Are these adaptations beneficial or detrimental?

## Sampling

Data collection will take place with the target sample sizes and at the time points in the table below.

Table 5: Sampling design

Method	Sample	Sub-group	Number per subgroup	Total number
<b>Pre and post teacher questionnaire</b>	Teachers	Subject Leads, Designated Teachers, and year 5 and 6 teachers	4 per school	720 teachers
<b>Workshop observations</b>	Workshop sessions	Introductory & moving forward sessions	2 sessions	8 observations
		Workshop sessions	6 workshops	
<b>Case studies</b>	Schools	Intervention	12	14 case studies
		Control	2	

### Pre- and post- teacher questionnaire

Subject Leads, Designated Teachers, and year 5 and 6 teachers in each of the intervention and control schools taking part in the study comprise the sample for the pre and post teacher questionnaire.

### Workshop observations

A total of eight observations will be conducted, covering the programme's two introductory sessions and its six workshops. The approach to sampling the workshop observations will be defined once the recruitment process is completed, if more than a total of eight sessions and workshops are required.

### Case studies

We will conduct case studies of 14 participating schools, 12 intervention and two control. We will use purposive sampling to identify case study schools. Purposive sampling will be used, aiming for variation in:

- geography
- percentage of CIN/ LAC
- schools in different improvement stages as judged by Ofsted
- teacher attendance to the RLC introductory session and workshops, if any.

The case studies will involve interviews with schools' head teachers, Subject Leads, Designated Teacher and year 5 and 6 teachers. Consent will be acquired prior to the interview.

Table 6: Case study sampling

	Total no of head teacher interviews	Total no of Subject Lead & Designated Teacher interviews	Total no of year 5 & 6 teacher interviews
Intervention schools (x 12)	12 (1 per school)	24 (2 per school)	36 - 48 (estimate of 3-4 per school)
Control (x 2)	2 (1 per school)	4 (2 per school)	6 - 8 (estimate of 3-4 per school)
<b>Total no across schools</b>	<b>14</b>	<b>28</b>	<b>42 - 56</b>

## Data collection methods

### Pre and post teacher questionnaire

An online pre and post questionnaire will be administered to Subject Leads, Designated Teachers and year 5 and 6 teachers of both the intervention and control schools at the beginning and at the end of the RLC programme. This is the same questionnaire which will be used to assess the impact of the programme with additional questions directly related to the IPE. The IPE questions will be guided by the evaluation framework as outlined in Table 4.

### Workshop observations

Workshop observations of RLC sessions will be conducted to ensure key questions included in the IPE evaluation framework are answered. A semi-structured observation guide will be used to ensure data collection is consistent and all relevant data is collected.

### Case studies

Case studies will consist of a series of telephone or virtual semi-structured interviews with Head Teachers, Subject Leads, Designated Teachers, and year 5 and 6 teachers in the spring term of the academic year 2021/22. The content of interviews will be guided by the evaluation framework and tailored depending on the interviewee.

## Data analysis

### Pre and post teacher questionnaires

The analysis of the questionnaire data for the IPE questions will follow the approach outlined in the exploratory analysis section of the impact section discussed earlier in the protocol.

## **Workshop observations**

Workshop observations will be triangulated alongside the findings from the teacher questionnaires and the case study interviews. For closed questions and where appropriate descriptors will be developed with numerical values associated to them or dichotomous answers to support the analysis. Data will be coded and analysed thematically, looking at specific context, mechanism, outcome relationships as outlined in the programme's Logic Model.

## **Case studies**

All interviews for case studies will be transcribed. Analysis will begin by using NVivo11 for data management and coding. The coding framework will be developed both deductively based on the Logic Model and the IPE evaluation framework, and inductively, including unexpected issues emerging in the data. Setting up the coding framework in NVivo11 will facilitate quality control and ensure that the analysis is comprehensive, rigorous, and underpinned by a consistent approach.

The analysis will develop a detailed understanding of each individual case, which will be followed by an analysis of key themes in the findings across cases. The analysis will include descriptive accounts of what has occurred in each case as well as explanatory accounts about what works, for whom, in what circumstances, and why.

## Cost evaluation

### Cost Analysis

The cost analysis will be based on the principles set out in the 'Cost evaluation guidance for EEF evaluations' (Education Endowment Foundation, 2019) and thus, the "ingredients method" (Levin, et al., 2018). This method is essentially a bottom-up approach, which allows accounting for the costs of all resources necessary to implement the RLC programme regardless of who incurs the costs.

The ingredient method is linked to the Logic Model: the Logic Model describes the resources that LAs and school need to implement the programme, while the cost analysis finds the monetary value of these resources.

The stakeholders on whom the costs of the RLC programme may fall are:

- LAs (virtual schools)
- Schools
- Delivery partners

The cost analysis will only report costs that are additional to the 'Business as Usual' costs. In other words, the cost analysis will compare the costs of the RLC to the costs of any existing programme or activity already carried out from the point of view of the stakeholders bearing the costs. In some cases, all programme costs will be additional, i.e., if there was no previous programme at the school level, all the school costs would be considered additional.

The analysis will distinguish between:

- **Pre-requisites costs**, including all resources (e.g., equipment, staff) required for the implementation of the programme, but that the actors bearing the costs already have. For instance, the training may be delivered through computer or online equipment, which the school already have. These will not be considered additional costs (unless schools bought these on purpose) but will be reported separately for information. Similarly, delivery partners might have already the necessary equipment in place to develop the training material (e.g., existing templates, printers, etc...)
- **Start-up costs**: they include the necessary resources to start the implementation of a programme each year. For instance, the cost of developing the training material would be a start-up cost which will not be incurred again (at least not in the same amount) once the programme is scaled-up.
- **Recurring costs**: refers to the resources needed each year to implement the programme. These are important elements to consider for a future scale-up of the programme.

The following cost categories will be included in the analysis (other categories might emerge during the IPE):

- **Staff costs for the implementation of the programme**, including salaries of the RLC facilitators, if possible, broken down by seniority of the staff involved.

- **Staff costs during RLC workshops and sessions**, including costs of teacher cover for the hours the teachers spend in the workshops, as well as any cost to attend the workshops (e.g., transportation costs)
- **Programme costs incurred by the virtual schools**, including costs of recruiting schools and any preparation costs for the programme. As VSHs are supposed to carry out these activities during their working time, these costs will not be considered “additional”, but they will be reported separately to provide an estimate of the time commitment required for the programme
- **Facilities, equipment, and materials**, including any costs for printing training material (which may be incurred by the delivery partners or the schools), provision of venue (if the training is outside the school premises) or other technical equipment. We expect these to be low for the RLC as many schools will already have facilities and spaces where to conduct the training, hence the RLC training will not create large additional costs.
- **Other costs** (residual category), including the existence of other costs will be revealed during the IPE, which will gather further details on the implementation requirements in each school.

Data will be collected using a proforma filled in by the Durham delivery team with additional information collected from schools as part of the post-questionnaire to Subject Leaders and/or Designated Teachers (see IPE Section).

In some cases, assumptions will be necessary to estimate costs. A typical example are the costs of equipment, which may be used both for the programme, and other (including business as usual) activities. Splitting the costs to attribute to the programme may be challenging and requires assumptions formulated based on discussions with stakeholders.

The primary output of the cost analysis will be the total cost of the programme per CIN/LAC per school. This will be obtained by dividing the total costs of the programme by the total number of participating schools and then by the total number of CIN/LAC in year 6 in the participating schools.

A sensitivity analysis will aim to explore the variability of costs incurred by the main actors, e.g. virtual schools and schools.

We envisage carrying out the following sensitivity analyses:

- Reporting, for each item of costs, mean, median, standard deviation, minimum and maximum, to have a sense of the dispersion of costs across schools.
- Breakdown of the costs by school size (number of pupils).
- Breakdown of the costs by size of the target population in the schools.

The sensitivity analysis will also test (if needed) the implication of any assumptions made for the estimation of the costs. This will be done by recomputing total costs-per-pupil per school change changing under different assumptions on the costs.

## Ethics and Participation

### Process for obtaining ethical approval

We obtained research ethics advice through Ipsos MORI's research ethics process in September 2021. This process included completing an ethics review form with detailed information on the project as well as submitting relevant information sheets and consent forms for review. The ethics reviewers were independent and not otherwise involved in any evaluation activities. The evaluation team submitted the relevant materials to the Ipsos Ethics Group on Monday 23<sup>rd</sup> August, 2021, and received feedback from the reviewers which has been reflected in this section. If any changes occur to the intervention delivery or evaluation, the Principal Investigator will make these known to the chair of the Ipsos MORI Public Affairs Research Ethics Group.

In conversation with Durham University and the What Works for Children's Social Care, we have considered ethical risks and trade-offs of conducting an experimental evaluation and are satisfied that these are reasonable. We also believe that the evaluation has merit in providing evidence on the effectiveness of the RLC programme for improving learning outcomes for CIN/ LAC.

### Consent

#### **Administrative data collection and analysis**

We will seek consent to randomisation from schools via their school leadership. To do so, we will provide virtual schools with information to distribute to schools and Head Teachers via virtual schools. Virtual schools will be responsible for sharing information with schools as part of the recruitment process. This information will include information packs with details on the nature of the intervention as well as the evaluation and the RCT methodology. Schools will also be invited to two webinars (hosted by the WWCSC and Durham University) where we will explain the purpose and nature of the evaluation and respond to any questions they have in order to ensure that they are fully informed.

After schools have confirmed their interest in participating in the programme, we will disseminate a consent form requiring sign off by Head Teachers, which will detail the terms and conditions of participation in the RLC programme and evaluation, including their agreement to participate in the evaluation following their allocation to the intervention or control group.

#### **National Pupil Database administrative data on year 6 CIN/LAC**

KS2 attainment data will be collected on the basis of legitimate public interests. Since it is collected as part of schools' regular reporting obligations and will not include any personally identifiable information on CIN/LAC, consent from parents, guardians, or carers will not be required. Data collection will be minimised to ensure that no personally identifiable information is collected or can be linked back to individual pupils.

#### **Questionnaires and case studies with teachers**

We will seek consent for participation in the teacher questionnaires and case study interviews from individual teachers. For the questionnaires, we will include a consent form for teachers to provide their consent to participate at the start of the survey questionnaire. For the case study interviews, interviewers will check and record whether interviewees consent before starting each interview.

Teachers will be informed about the nature of the evaluation and their role in it via their schools through the information packs (which will be disseminated prior to the distribution of the survey link). This will include an electronic copy of our information sheet and consent form to Head Teachers. The information sheet will include details on the evaluation, the data that will be collected, how it will be collected, stored, and secured, and how they can withdraw their consent if they choose not to participate. It will clearly state that teachers' participation is voluntary and that they do not have to complete the questionnaire or participate in case studies if they do not want to. Once case study schools are selected, participants will be informed again about the nature of the research that their participation is voluntary.

### Ethical considerations relating to the interviews

In terms of content, the interviews will not ask teachers to discuss personal details of CIN/LAC or any potentially sensitive information, and will instead focus on the experience of participating in the RLC, collaborating with other teachers, applying new teaching strategies, and related changes in pupils' behaviour. These expectations will be clearly explained to the interviewee before the interview takes place.

Despite our focus on the RLC intervention (not personal histories) some teachers may be prompted to reflect on things that have happened with CIN/LAC in their pasts. Asking about new teaching strategies to engage CIN/LAC in a research interview may make teachers recall traumatic events experienced by CIN/LAC. We will develop plans for what to do if an interviewee becomes upset. We will go through this plan with moderators in a briefing session before we start the fieldwork and include it as a separate guidance sheet along with the topic guides. We will include techniques for supporting participants who become upset, such as:

- Making sure moderators are aware of any topics that could potentially be upsetting;
- Alternating between "light" and "heavy" topics in the discussion guide, or having a light topic fully immediately after a heavy topic;
- Giving participants enough space to talk about something difficult/upsetting, but knowing when to sensitively move the conversation on; and
- Making sure to end the interview on a positive note if possible.

During interviews we will be flexible, use open questions, and take a friendly and encouraging approach. We will be willing to take breaks and explore topics of interest to the teacher rather than being bound by the topic guide. To build rapport, we will use questions to check understanding; combining verbal and non-verbal communication to facilitate understanding; and allow plenty of time and tailored support for teachers to make a decision about participation or answering individual questions.

Researchers will make it clear to teachers, both in writing and verbally, that whilst the information they give is confidential, researchers will be legally bound to report anything that suggests children or someone else is at risk of serious harm.

## Registration

In line with WWCS requirements we will register this trial with the Open Science Framework (OSF) and update this trial registry with results at the end of the project.

## Data protection

We will ensure compliance with all data protection regulations (GDPR) and Ipsos MORI's strict information security policy. A Data Privacy Impact Assessment may be considered necessary, as the study will be collecting information from administrative sources about CIN/LAC gender and ethnicity, which is considered sensitive.

Data protection considerations differ for teachers and year 6 CIN/LAC. For the teacher sample, Ipsos MORI will not provide any identifiable information to WWCS or virtual schools from teachers and will thus act as data controller. For year 6 CIN/LAC data, provided by the DfE through the NPD, Ipsos MORI will act as data processor.

For the teacher questionnaire and case study interviews, we rely on the legal basis of consent for processing interviewee and questionnaire respondent data. For the administrative data request, we rely on legitimate interests as our legal basis for data processing. This includes demographic data (including gender and ethnicity), child's care status, and KS2 attainment scores. The additional condition for processing the special category data on ethnic group is Article 9(j) of the DPA 2018 (Archiving, research and statistics). We are aware that such processing is subject to appropriate safeguards. We plan a number of steps to ensure data minimisation. We consider the administrative data to be pseudonymised. The data will be transferred to WWCS's data archive on completion of the project.

All Ipsos MORI's research operations are governed by the Market Research Society Code of Conduct. We also hold the following international quality standards covering quality management systems, interviewer quality and information security: ISO 20252:2006, ISO 9001:2008 and ISO 27001:2005.

## Data security

Our data security processes meet the standards outlined in the Data Protection Act 2018. Ipsos MORI has the Cyber Essentials standard. Any personal data will be held securely on our UK servers, and securely destroyed at the end of the project. Ipsos MORI uses a purpose-built and dedicated file services solution hosted by Rackspace UK, located in Berkshire. This is accessed and controlled by Ipsos employees only. Rackspace UK are a highly regarded industry leader and carry a full set of ISO certifications. The environmentally friendly data centre ensures enhanced levels of power and cooling and physical security on a 24x7x365 basis.

Any enhanced sample data will be encrypted and sent over our secure file transfer system, Ipsos Transfer. All projects that involve personal data processing are required to complete a data flow and post a privacy policy online for respondents, using standardised templates.



## Data protection statement

### **This Ipsos MORI Study and your personal data: Research Learning Communities (RLC) Evaluation**

- Ipsos MORI is inviting you to take part in this evaluation on behalf of the What Works Centre for Children’s Social Care (WWCSC), to help the WWCSC assess the impact of the RLC programme and develop a better understanding of how to support teachers to improve teaching practices for children in need and looked after children, to ultimately improve their learning outcomes.
- This Privacy Notice explains who we are, the personal data we collect, how we use it, who we share it with, and what your legal rights are.

#### **About Ipsos MORI**

- Market and Opinion Research International Limited is a specialist research agency, commonly known as “Ipsos MORI”. Ipsos MORI is part of the Ipsos worldwide group of companies, and a member of the Market Research Society. As such we abide by the Market Research Society Code of Conduct and associated regulations and guidelines.

#### **About What Works for Children’s Social Care**

- WWCSC were commissioned by the DfE to work alongside CASCADE at Cardiff University. Engagement and co-design are central to our approach and we are working in close consultation with leaders, practitioners, children and young people, families and researchers across the sector to:
  - Identify gaps in the evidence, and create new evidence through trials and evaluations
  - Collate, synthesise and review existing evidence
  - Develop, test and publish tools and services that support the greater use of evidence and inform the design of the future Centre
  - Champion the application of robust standards of evidence in children’s social care research

#### **What personal data has Ipsos MORI received from WWCSC for this evaluation?**

- The WWCSC has shared a limited amount of your personal data so that we can invite you to take part in the evaluation, including an online survey and (if selected) workshop observations and/or interviews.
- The personal data that WWCSC has shared with us for the evaluation includes your name, job role, and email address.

#### **How has this personal data been obtained?**

- WWCSC obtained the above personal data from consent forms completed and signed by the Head Teacher of each participating school. The forms required Head Teachers to provide their consent to participate in the RLC programme and evaluation as well as the names, job roles, and email addresses of Subject Leads, Designated Teachers, and year 5 and 6 teachers in their schools.

### **What is Ipsos MORI's legal basis for processing your personal data?**

- Ipsos MORI require a legal basis to process your personal data. Our legal basis for processing is your consent to take part in this study. If you wish to withdraw your consent at any time, please see the section below covering 'Your Rights'.

### **Do I have to take part?**

- Taking part is entirely voluntary and any answers you give are given with your consent.

### **How will Ipsos MORI use any personal data including survey responses you provide?**

- Firstly, taking part in the questionnaires, observations, and/or interviews is entirely voluntary.
- Ipsos MORI will keep your responses in strict confidence in accordance with this Privacy Policy. Anonymised individual responses may be shared with the WWCS, however Ipsos MORI can assure you that you and your school will NOT be identifiable to the WWCS or in any published results.
- Ipsos MORI and WWCS will only use your personal data and responses solely for research purposes.

### **How will Ipsos MORI ensure my personal information is secure?**

- Ipsos MORI takes its information security responsibilities seriously and applies various precautions to ensure your information is protected from loss, theft or misuse. Security precautions include appropriate physical security of offices and controlled and limited access to computer systems.
- Ipsos MORI has regular internal and external audits of its information security controls and working practices and is accredited to the International Standard for Information Security, ISO 27001.

### **How long will Ipsos MORI retain my personal data and identifiable responses?**

- Ipsos MORI will only retain your data in a way that can identify you for as long as is necessary to support the research project and findings. In practice, this means that once we have satisfactorily reported the research findings to the WWCS, we will securely remove your personal, identifying data from our systems by May 2023.

### **Your rights and the General Data Protection Regulation (GDPR)**

- You have the right to access your personal data within the limited period that Ipsos MORI holds it.
- Providing responses to the online questionnaire and in interviews is entirely voluntary and is done so with your consent. You have the right to withdraw your consent to our processing of your personal data at any time, although once data is analysed it is not possible to withdraw your data from the outputs.
- You also have the right to rectify any incorrect or out-of-date personal data about you which we may hold.
- If you want to exercise your rights, please contact Ipsos MORI at the details provided below.
- If you have any complaints, we would appreciate it if you give us the opportunity to resolve any issue first, by contacting us as set out below. You are, however, always

entitled to the UK's Information Commissioner's Office (ICO), if you have concerns on how we have processed your personal data. You can find details about how to contact the Information Commissioner's Office at <https://ico.org.uk/global/contact-us/> or by sending an email to: [casework@ico.org.uk](mailto:casework@ico.org.uk).

### **Where will my personal data be held and processed?**

- All of your personal data used and collected for the evaluation will be stored and processed in data centres and servers within the United Kingdom.

### **How can I contact Ipsos MORI and WWCSC about this study and/or my personal data?**

- **Contact Ipsos MORI: Email:** [compliance@ipsos.com](mailto:compliance@ipsos.com) with "Research Learning Communities Evaluation" in the email subject line  
**Post:** Research Learning Communities Evaluation, Compliance Department  
Market and Opinion Research International Limited  
3 Thomas More Square, London E1W 1YW, United Kingdom
- **Contact What Works for Children's Social Care: Email:** [Programmes@whatworks-csc.org.uk](mailto:Programmes@whatworks-csc.org.uk)  
**Post:** Research Learning Communities Evaluation  
The Evidence Quarter  
Albany House; Petty France  
Westminster, London, SW1H 9EA

## Personnel

### Delivery team

Table 7: RLC delivery team

Name	Organisation	Roles and responsibilities
Chris Brown	Durham University	Programme Director

### Evaluation team

Table 8: Evaluation team

Name	Organisation	Roles and responsibilities
Elpida Acharidou	Ipsos MORI	Principal Investigator
Nadia Badaoui	Ipsos MORI	Project Manager
Karl Ashworth	Ipsos MORI	RCT Lead
Stella Capuano	Ipsos MORI	RCT Delivery
Jaimin Shah	Ipsos MORI	RCT Delivery
Emily Mason	Ipsos MORI	IPE Lead
Adam Behailu	Ipsos MORI	IPE Delivery

## Timeline

Table 9: Evaluation timeline

Dates (w/c)	Activity	Leading
18 Jul	Logic Model development	IM
18 Jul	Protocol development	IM
9 Aug	Governance, contracts	IM / WWCS
23 Aug	First draft protocol to WWCS	IM
23 Aug	Ethics board approval	IM
30 Aug	Virtual and individual schools confirmed	WWCS
16 Sep	Protocol changes agreed	IM
24 Sep	Protocol published	IM / WWCS
30 Sep	Randomisation completed	IM
1 Oct	Round 1 Teacher survey launched	IM
15 Oct	Programme launch	DU
15 Oct	Protocol changes agreed	IM / WWCS
1 Nov	Amended protocol published	IM / WWCS
Mar 2022 – May 2022	RLC workshop observations	IM
Mar 2022 – May 2022	RLC Case study interviews	IM
Apr 2022 – May 2022	Round 2 Teacher survey launched	IM
May 2022 – Aug 2022	NPD application for data	IM
Aug 2022 – Feb 2023	Access to NPD Data	IM
Nov 2022	Interim report	IM
Jun 2022 – Mar 2023	Impact evaluation and IPE analysis	IM
Aug 2022 – Mar 2023	Cost analysis	IM
Mar 2023	Final report	IM



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