

Research-informed schools evaluation: Development of the Rochdale Research into Practice model to increase school networks' use of research

Protocol for the study funded by the Education Endowment Foundation

1.1 Introduction

NatCen Social Research is delighted to be carrying out this study which aims to explore how networks of schools can make their organisations more research informed by training and supporting teachers to use evidence-based practices and improve pupil attainment.

The Rochdale research into practice model is based around the Inspirational Professional Learning Community Network (IPLCN) of ten primary schools. Therefore, randomisation could only be possible at the level of schools, and as such we do not recommend creating a comparison group (i.e. a randomly allocated control group of schools) at this developmental stage. The focus of our formative evaluation will be on a process evaluation that seeks to capture the changes in schools as they take part in the project. However, we will also capture quantitative data on teacher awareness, understanding and action, and how this progresses over the duration of the project, as well as on pupil performance.

The Continued Professional Development (CPD) Lead (referred to in other documents as the CPD Teacher Leader) will be working with ten primary schools from the IPLCN based in Rochdale to deliver the intervention. The CPD Lead will primarily be working with the Maths Subject Lead, the Literacy Subject Lead and a Classroom Teacher from each participating school through a series of termly 'research in practice' events and half day visits in each school every half term.

At each school the Head teacher will identify one enthusiastic teacher (referred to below as Classroom Teacher) who is considered good to outstanding to take part in the trial. The literacy and numeracy subject leads are also expected to attend the events and to support the teacher in schools.

Each term the intervention will focus on a different evidence-based approach that has shown to improve teaching and learning - e.g. metacognition and feedback. The CPD Lead will outline the essential elements of the approach and encourage teachers to develop this in their own practice. The school visits will be used to ensure the principles of the approach are embedded in the teachers' practice. A key element of the approach is to ensure the approach is embedded across whole class and small group (e.g. guided group) teaching.

The intervention aims to help staff at the participating schools to:

- a. Have more positive views about research's use for improving teaching and learning, and be open to doing so
- b. Apply educational research findings in the classroom and at a strategic development level.
- c. Establish a stronger culture of evidence-based enquiry and practice.

These three aspects are expected to help improve the quality of the teaching and learning in each school.

1.2 Evaluation design

1.2.1 Logic model

As evaluators, we will work collaboratively with the project team to understand their delivery model and build up an 'impact map', or logic model.

A logic model approach holds that programme interventions, in almost all cases, are based on an underlying logic or theory and a set of assumptions about how an intervention works. At its core, this approach provides an explanation of how a group of stakeholders expects to reach a commonly understood goal.¹

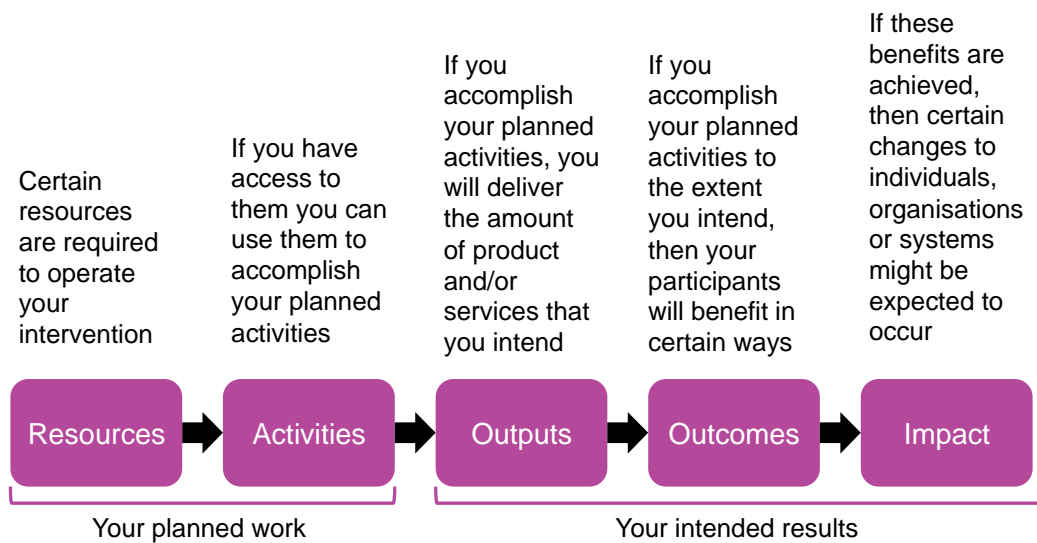
This approach promotes a systematic and visual way to represent a shared understanding of the component parts of a programme. The development process considers the programme's planned work and its intended outcomes. A logic model separates the key components of a programme which are usually structured in a linear model as shown in the diagram below (see Figure 1). Mapping a programme in this way helps to visualise and understand how human and financial investments can contribute to achieving intended programme goals and can lead to programme improvements.

Programme logic models are useful in the design and planning stages of a programme and in implementing programme components and activities. Logic models are used also to identify data collection points for monitoring and evaluation purposes and to devise an evaluation plan. Finally, evaluations underpinned by logic models help to understand how well a programme is functioning, whether it is achieving the desired outcomes and where the programme has encountered delivery challenges.²

¹ Anderson, A. (2007). The community builder's approach to theory of change: A practical guide to theory development. The Aspen Institute. <http://www.epa.gov/evaluate/pdf/eval-guides/logic-model-development-guide.pdf>

² W. K. Kellogg Foundation. (2004). Logic model development guide. <http://www.epa.gov/evaluate/pdf/eval-guides/logic-model-development-guide.pdf>

Figure 1. How to read a logic model (adapted from W. K. Kellogg Foundation)



On the evaluation of the Rochdale Research into Practice model, we will develop a logic model in consultation with stakeholders in the early stages of the evaluation, so that the project team could use it to inform their programme activities. The logic model will also inform our development of research instruments (e.g. topic guides) and will generally support our formative evaluation of the Rochdale Research into Practice model. We will include the logic model in the final report on the evaluation, together with our reflections on whether the model needs any adjustments before a full trial of the intervention in the future.

1.2.2 Process evaluation

The design of the process evaluation draws on the fact that this is a pilot study, which is meant to be flexible and interactive in its nature. We will aim to inform the project team of the research findings as they become available, and we will be able to adjust the proposed methodology if necessary so that it suits best the aims of this formative evaluation.

We will speak to the CPD Lead and teachers participating in the programme (including the Maths Subject lead, the Literacy Subject Lead and the Classroom Teacher) to explore what mechanisms they believe are leading to outcomes or changes in their practice, by carrying out in-depth interviews with them and observations of their meetings.

We propose an initial face-to-face meeting with the CPD Lead to discuss and start developing a logic model for the programme (see section 1.2.1). We will also attend the launch event for the programme in September 2014 to carry out observations of how the programme is explained to participating schools and the discussion of its elements at the event. In addition, we will carry out at least three telephone interviews with the CPD Lead throughout the school year 2014-2015, to discuss the progress of the programme, any issues which came up during their delivery of the programme and any learning to inform the evaluation.

We will then speak to a range of teachers in the participating schools throughout the school year 2014-2015, including the Classroom Teacher, the Maths subject lead, the Literacy subject lead and the Head teacher.

This will involve the following elements:

- In-depth interviews with Classroom Teachers in each school (in the Autumn term, Classroom Teachers in all ten participating schools will be interviewed on the

telephone; then in the Spring or Summer term, Classroom Teachers in case study schools (n=5) will be interviewed face-to-face and Classroom Teachers in other schools will be interviewed on the telephone).

- Case studies with five schools, which will be selected in consultation with the CPD Lead. The case studies will involve visits to the schools by the research team to conduct face-to-face in-depth interviews with the nominated Classroom Teacher, as well as with two or three other members of staff including the Head teacher, the Literacy subject lead and the Maths subject lead. The case studies will also include (where possible) observations of meetings (or training sessions) between the CPD Lead and the teachers implementing the programme in the school. The case study visits to school will take place over the Spring and Summer terms.

This results in a total of up to 18 telephone in-depth interviews, up to 21 face-to-face in-depth interviews and six observations of events, training sessions and meetings, which will provide a valid, robust picture of the intervention, and how it works for the whole range of participants.

It is proposed that the evaluation will run in schools during the academic year 2014/15 with schools being recruited by the end of June 2014.

It will be important to understand:

- What role the CPD Lead / Classroom Teacher / Subject leads play
- How they support other teachers in the school
- How the nominated Classroom Teacher works with the subject leads
- What skills/resources are necessary for teachers to engage more with research
- What research they used and how
- Implications for everyday teaching practice
- What other circumstances need to be in place for optimal impact
- Additional resources/costs involved
- What is/isn't working

The interviews will be arranged directly with participants.

We will pull out the key issues from across all of the schools as well as processes for bringing about change and mechanisms which may lead to the success of such a project. We will also look at the key features of the CPD Lead role and consider sustainability and future roll out. The final report will use case studies to illustrate our key findings.

1.2.3 Quantitative data collection and analysis

In order to understand teachers' views and experiences of using research to influence teaching and the process of making schools more research-informed we will survey all teaching staff in all of the participating schools. All teachers at schools participating in the Rochdale model will be asked to complete a short online survey at two points in time: in September-October 2014 and again in June/July 2015. The total size of the issued sample will be around 190 teachers.

The survey will be a standardised questionnaire of up to 20 minutes in length used across all the evaluations the Research Use in Schools round. NatCen will receive the final questionnaires from NfER which will specify all question text, introductions, textfills, routing and response validations required to produce the web survey. We are happy to provide comments on early questionnaire drafts to NfER and EEF.

Schools will be required to provide NatCen with a list of teaching staff which includes full name, email address and role/position which will form the sample for the web survey. The Memorandum of Understanding with schools states that they will be expected to provide this information and encourage participation in the survey. NatCen will contact the Head teacher and the Classroom Teacher at each school by post about the survey and all teaching staff will be sent an email inviting them to complete the survey online with details about completion.

NatCen will send updates to the CPD Lead with details about numbers of completed surveys in order to encourage response. We have assumed a response rate of 75 per cent (140 completed questionnaires) for planning and cost purposes as participation in the survey will be considered a key component of the programme with schools so teachers are expecting to take part. However, achieving this high response rate is dependent on the Classroom Teachers and the CPD Lead actively encouraging survey completions.

Respondents will be sent a number of reminder emails by NatCen team to encourage participation, in addition to contacts from the CPD Lead and the Classroom Teacher in each school. A helpline and an email address will be available to respondents for any queries or concerns they may have. There will also be a page on NatCen website with information about the study. A link to that web page and contact details for any queries will be included in all correspondence with potential respondents.

1.2.4 Analysis of attainment outcomes

Whilst attainment outcomes are not the focus of this development study, it is of interest to EEF to see whether it is possible to detect any changes in pupil performance/progress over the time frame of the intervention. Depending on the findings regarding attainment, this may indicate the anticipated effect size, and therefore, inform the trial design if a full trial is planned in the future. To address this, we will perform analysis of Key Stage 2 outcomes in the participating schools compared to similar schools using the National Pupil Database (NPD). In order to do this we will select schools that have similar characteristics to those participating in the project, which we anticipate to include alliance membership, percentage of children eligible for FSM, ethnicity and EAL profile, and attainment. (The design of this element will be discussed with the EEF separately once the logic model for the intervention is finalised and there is greater clarity about which NPD data is available at the time of the proposed analysis.) This will also help EEF to monitor any longer term impact on attainment from any changes in research engagement in the school as a result of the intervention.

1.2.5 Effective collaboration

At NatCen, we have built up valuable learning from the projects we have conducted for EEF over the past years. One of the most important ways in which we can ensure high quality and cost-effectiveness is through the clear allocation of roles and responsibilities between EEF, the programme team, ourselves as evaluators, research participants and other stakeholders. We anticipate working in close partnership with the programme team during the development phase. We would identify what stage their plans are at and what further information they need to inform this. We would test out the practicalities of delivering the intervention which in turn would feed into the design of any subsequent trial. Our evaluation specialists will be closely involved in this study, helping to ensure this formative evaluation achieves its objectives. Because of the intensity of this development pilot study, we envisage a close working relationship between the project and evaluation teams throughout the project – this is something we welcome. We believe that as non-academic contributors we can add value, based on our experience of regularly carrying out and evaluating similar social research projects, to the management of the overall project and advise on implementing the programme in schools.

1.2.6 Research team

This evaluation will be carried out by an experienced team of researchers from within the Children, Families and Work team and the Evaluations team at NatCen. The key members of the project team will be:

- **Dr Svetlana Speight**, Research Director, will lead the study and will be the overall Project Manager
- **Meg Callanan**, Senior Researcher, will be mainly responsible for the process evaluation
- **Dr Julia Griggs**, Senior Researcher, will be responsible for the analysis of attainment outcomes
- **Alexandra Fry**, Researcher, will be responsible for day-to-day running of the project, including both the quantitative and the qualitative elements
- **Dr Triin Edovald**, Research Director, will support the project team drawing on her specialist knowledge of evaluation design and analysis.

1.2.7 Timetable

We have suggested a timeline for the project based on early meetings with the CPD Lead and EEF to conduct the development phase between July 2014 and December 2015, which can feed into an application for an RCT in 2016.

Timetable		
Month	Intervention activities	Evaluation activities
2014		
June	Memorandum of Understanding (MoU) agreed between project and evaluation teams	
July	MoU signed by schools and returned to CPD Lead	
Aug		Questionnaire spec received from NfER (1st week in August)
Sept		Pre-intervention survey fieldwork Face-to-face meeting with the CPD Lead to develop the logic model Launch event observation
Oct	Delivery of intervention starts	First interview with the CPD Lead
Nov		Depth telephone interviews with Classroom Teachers in schools start Baseline analysis of survey responses complete
Dec		
2015		
Jan		
Feb		Second interview with the CPD Lead Case studies start in five schools
Mar		
April		

Timetable		
Month	Intervention activities	Evaluation activities
May		Questionnaire spec received from NfER (1st week in May) Third interview with the CPD Lead Last phase of telephone depth interviews with Classroom teachers start
June		Post-intervention survey fieldwork
July		Case study school visits and telephone interviews completed
Aug		Survey and qualitative analysis
Sept		Early findings to EEF
Oct		NPD data available
Nov		
Dec		Full draft report submitted to EEF

1.3 Evaluator experience

At NatCen Social Research, we can point to a long and successful track record of exploring and evaluating the effectiveness of school-based interventions designed to improve teaching practices and enhance pupil attainment, using both impact and process evaluations. Our current and recent work includes a portfolio of evaluation projects for the Education Endowment Foundation (EEF) as well as large-scale evaluations of school-based initiatives such as Every Child a Reader and an evaluation of a Place2Be programme (aiming to support Newly Qualified Teachers (NQTs) to manage pupil behaviour better). We have extensive experience of designing and managing randomised control trials (RCTs) as well as quasi-experimental evaluations. Our RCTs include an exploration of the effect of music tuition on maths and literacy attainment for primary school pupils, and evaluations of the Teens and Toddlers intervention and the Employment Retention and Advancement Demonstration. Our statisticians also conduct a large number of randomised control experiments in survey fieldwork methodology, testing innovative fieldwork procedures.

The Children, Families and Work Team at NatCen have expertise in how to carry out robust process evaluations and the capacity to undertake this project. We are used to exploring processes which lead to impacts with a range of stakeholders in schools. We understand how to carry these out in a way that involves and engages teaching staff whilst minimising burden on them. We have experience of these in both primary and secondary settings.