Evidence for the Frontline
NFER
David Sims

Evaluation Summary	
Number of schools	31
Design	Pilot

Evaluation aims

The aims of the evaluation are to establish:

i. Does the intervention show evidence of promise? I.e.:
    – explore perceived outcomes from the service on school leaders'/teachers' behaviours and cultures around research engagement, and any resulting changes in classroom or school practice

ii. Is the intervention feasible? I.e.:
    – identify the key effective features, and any challenges/barriers, to the design, management and delivery of the evidence brokerage service, to inform further implementation
    – establish demand from schools for an evidence brokerage service
    – explore the supply of (academic) evidence expertise – who, what, when and how, and if there is sufficient supply

iii. Is the intervention ready to be evaluated in a trial? I.e.:
    – identify suitable outcome measures to be considered in any future pilot trial of the service.
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Overall design

We will investigate these aims through the following process, reflecting the formative nature of the development and pilot of the brokerage service. Note, for the purposes of this project, pilot does not refer to a pilot RCT (as in other EEF commissions). The 'pilot phase' of this project refers to the continued development and implementation of the brokerage service, with formative evaluation with a wider range of schools.

Development phase - Theory of Change development, interviews with service developers, collaborative development of MI collection tool APR - AUG 2015

Establishing demand - school consultation using NFER's Teacher Voice panel MAY-JUL 2015

Pilot phase - baseline and follow-up school surveys, telephone interviews with schools, service developers, brokers and experts, analysis of monitoring data SEP 2015 - JUL 2016

Reporting including interim feedback based on ToC, demand and early development - JUL-AUG 2015; final report on key effective features/barriers, perceived outcomes, and recomnmendations for wider roll out - SEP-OCT 2016

NFER in collaboration with EEF and the IEE/Sandringham School team/CEBE will be focusing on a formative evaluation of a service in early development. In addition, looking ahead to informing a pilot trial or potential specification for a full randomised controlled trial (RCT), the brokerage team will provide information on recruitment strategies and costs of the service. Similarly, the evaluation team will consider which outcome measures will be suitable for any further pilot trial (for example, attainment measures and/or research engagement/use measures).

Development phase

This phase of the study will focus on the early development of the Evidence for the Frontline brokerage service. The IEE/school team will work with a further 10 schools in addition to Sandringham School (i.e. a total of five primary schools, five secondary and one special school) to develop the service, from April – July 2015.

Recruiting developer schools (April 2015)

The IEE/Sandringham School team will recruit schools to the development phase. NFER will explore:

- how the schools are recruited (e.g. from networks such as the Whole Education Initiative, the Cooperative Network of Schools, Teaching School Alliance)

- which schools are involved – it will be helpful to aim to include schools that are more and less research engaged, and schools from more disadvantaged areas (using Free School Meals status as an indicator).

NFER will supply an excel form for the school team to keep a record of recruitment of schools in both the development and pilot phase.

NFER will supply an evaluation information sheet to developer schools.

Developing a Theory of Change (April-May 2015)

The NFER team, in collaboration with the school team/IEE and the EEF, will develop a Theory of Change (ToC) for the Evidence brokerage service. The Sandringham School team will use this in their development phase workshops, to provide a framework for the overall service. An NFER team member will attend one of these workshops to help collaboratively develop the ToC further. The ToC will take as its starting point the desired change that

Evidence for the Frontline is trying to bring about, and will identify the inputs and outputs that are required to facilitate that change. NFER will use the ToC throughout the pilot to inform question design, analysis and reporting; and to inform any future roll-out of the service.

The ToC will draw on current evidence on schools' use of evidence, including: NFER's rapid review of the evidence in knowledge mobilisation in the classroom (Nelson and O'Beirne, 2013); Sharples' report on Evidence for the Frontline (2013); Nutley's studies about use of evidence (2013, 2007); Campbell and Levin's paper on developing knowledge mobilisation to challenge educational disadvantage and inform practice (2012); and Slavin *et al.*'s article on the effects of a data-driven district reform model on state assessment outcomes (2013). The ToC will also be informed by other brokerage services (e.g. STEMNET's brokerage service, Straw *et al.*, 2015), and NFER's research-engaged schools programme, and relevant recent publications in this rapidly growing area.

Developing the MI data collection tool (April-July 2015)

We will provide advice to the school/IEE team on the development of a tool (e.g. a spreadsheet) for them to collect data on the extent and nature of service-usage once up and running. The tool will help determine the frequency of use of the service, the types of questions being asked, responses given, and any further follow-up.

We will develop the tool collaboratively with the service administrator (a member of the school team) to ensure it is both user-friendly and suitable for analyses purposes (we will take an interim download of data in December 2015). The NFER team will provide advice to the service administrator via telephone and email exchange, to support the development of the tool. We envisage that it will capture date, name and contact details, school name, nature/topic of question being asked, what prompted their question (e.g. the Sutton Trust-EEF Teaching and Learning Toolkit, other), outcome of call (e.g. referred to evidence, to the brokerage website, to an expert, put in touch with another school, etc), and any further follow-up or feedback from users or experts. It will need to be accessible by brokers/service providers, and may take the form of a networked spreadsheet or database. It will need to capture both telephone enquiries and web-based enquiries. We will ask the school/IEE team to capture website 'hits' data at aggregate level (not matched to individuals). All MI data will be captured by the service administrator/school/IEE team, and then passed to NFER via secure portal (in December 2015 and again at the end of July 2016).

Telephone interviews with service developers and brokers (June-July 2015)

We will undertake short telephone interviews with up to four service developers and brokers (i.e. from the Sandringham School team, the IEE team, the Coalition for Evidence-Based Education (CEBE) team if appropriate, and the developer group). The interviews will aim to establish how the service is being developed and managed, the training any brokers have received, what skillsets might be needed to offer the service, and any systems being put in place, for example, for quality assurance.

Attending a developer workshop (April-July 2015)

An NFER team member will attend the middle workshop during the development phase, to establish face-to-face relationships with the service developers. At the workshop, we will hear from developer schools what the service might look like, collaboratively refine the ToC, and explain the evaluation further. We will undertake some of the above interviews face-to-face at the workshop (rather than by telephone), if this is a suitable opportunity.

Establishing demand

Teacher Voice panel survey (May-July 2015)

In order to investigate potential demand for a brokerage service, we will carry out a school consultation using our Teacher Voice panel. This is an online survey completed by over 1,000 primary and secondary teaching staff and senior leaders from schools across England. The panel is representative of teachers nationally, although we should note that the sample may not be entirely representative of the whole school population in their views on research as they have chosen to be part of the NFER panel. Four questions will be included in the Teacher Voice survey (two single response questions, one open, and one multiple-tick) covering potential interest, potential usage, nature of the questions and queries schools might pose, and preferred formats. The deadline for submitting questions for the next round of Teacher Voice is 15th May 2015, with the survey live in from 5th – 10th June. Topline results are available late June (from 29th), with tabulated results available from 14th July 2015.

Pilot phase

The pilot study will serve three main functions: i) to continue to evaluate the implementation of the service (management, QA, monitoring data, etc); ii) to explore service-users' perspectives on the delivery of the pilot brokerage service and their experiences of engaging with and using the service; and iii) to determine the nature and range of outcomes for teachers and schools from engaging with the service. On point three, Slavin *et al.*'s (2013) trial in the US found that, four years after the introduction of a service on research-proven solutions to schools, there were positive effects on children's reading and maths (with outcomes translating to an impact of between four and seven months' progress over the course of a year). In the context of this pilot, it is unrealistic to expect to see outcomes on learning over the course of the year. Instead we will focus on outcomes relating to teachers' and schools' behaviours and cultures around research engagement, and any resulting changes in classroom or school practice.

Recruiting pilot schools (May-Sept 2015)

A total of 31 schools will be involved in the pilot phase (this will include the original 11 developer schools, plus a further 20 recruited to the pilot). The Sandringham School team/IEE will recruit schools to the pilot phase. As in the development phase, NFER will capture how schools are recruited, and which schools join the pilot. NFER will supply an excel form for records as stated previously. NFER will supply an evaluation information sheet to pilot schools. NFER and the School/IEE team will provide Memorandums of Understanding (MoUs)/Data Sharing agreements to all pilot schools, explaining their involvement in the evaluation, and how the monitoring and perceptual data collected will be shared and used.

Attending a pilot phase workshop (Sept 2015)

An NFER team member will attend one workshop at the start of the pilot phase, to observe how the service is introduced to schools; and understand initial reactions and questions.

Service-user surveys (Sept 2015 and June 2016)

We will undertake two online surveys of all 31 schools involved in the pilot brokerage service. Online surveys will be hosted on NFER's software suite Questback. This software allows for filtering and live monitoring and reporting during the survey period. The first survey, at the start of the autumn term 2015, will establish a baseline level of research knowledge and use amongst the 31 pilot phase schools. We will invite the school's nominated senior leader for the pilot, the school's lead contact for the pilot, and two further members of their teaching staff to complete the online survey. In the summer term 2016 we

will re-contact respondents to the first survey and *additionally* contact those who have accessed the service during the course of the pilot (this will be known from the monitoring data collection being completed by service providers/brokers). The surveys will explore:

- the extent of prior knowledge/use of research in the selected schools and perceived change over the past year
- the extent of use of the service including reasons for use; reasons for *not* using the service and barriers, and what, if anything, would encourage future use (i.e. is there demand)
- perceptions of the usefulness and appropriateness of the expertise provided, perceived impartiality, perceived quality of any expert advice received, and the barriers and necessary conditions for the service to be successful
- perceived benefits and resultant impact (for example, changes in teachers' values and behaviours, access to and use of evidence, classroom practice, teaching and learning, school approach to engaging with and using research, etc)
- what schools would be prepared to pay for the brokerage service (note, the service will be free to users during the pilot but there may be future costs)
- recommendations for the development of the brokerage service.

The survey will use a selection of items from the NFER research use survey, focusing on questions that will explore how far this kind of research-communication/engagement influences teachers' views on research evidence, use of evidence, translation into practice, and impacts on teaching and learning.

We will develop the survey instrument during June-August 2015, ready for September 2015. Note, we will collect respondent names and job roles from the baseline survey, in order to follow-up individuals later in the year. However, all reporting will be at an anonymous aggregate level.

School telephone interviews (March-May 2016)

In order to gain a more detailed understanding of the viability and usefulness of the service, how well it is felt to be working, and its perceived impacts, we will undertake qualitative telephone interviews in a sub-sample of seven schools that have used the service to varying degrees. We will interview up to three members of staff in each of these schools (e.g. the headteacher/deputy headteacher, another senior leader/head of department/key contact, and a classroom teacher) to gain a range of perspectives. These schools will be selected to cover a range of levels and nature of use of the service (according to service providers' monitoring data). Based on these interviews, we will create a vignette or 'school profile' for each of these seven schools setting out:

- school context and previous research engagement
- reasons for engaging with the service
- extent of engagement with the service (teasing out the extent of school-level engagement and individual head/teacher engagement, i.e. infiltration/immersion)
- nature of enquiry/enquiries, topic area(s), etc
- effective features and barriers – perceptions of usefulness, perceived quality of the evidence provided and any expert advice received, impartiality, nature and features of quality dialogue, time savings, needs-match, level of support provided, access to a wider range of evidence than previously, and any barriers
- perceived benefits – were they able to use the evidence/expertise and put it into practice? did it help them achieve the improvements they were looking for?
- perceived outcomes and impacts – on teachers' values, access to and use of evidence, changes in practice and learning, developing links and networks, and whether these changes are at whole-school or individual teacher level

- any other evidence of outcomes – for example, if changes are seen in school development plans, schemes of work, indications of impact on attainment
- any cost implications (positive or negative) of being involved (e.g. time savings, material costs)
- recommendations for the development of the brokerage service.

The telephone interviews will take place in the late spring term/early summer term 2016.

To ensure we sufficiently consider barriers to using the service, we will also interview up to six individuals from schools that have not used the service (if this is the case), or that have used it but have not followed up in any way with brokers (according to service monitoring data).

Telephone interviews with service providers and brokers (June-July 2016)

We will undertake further telephone interviews with up to four service providers/brokers (i.e. the Sandringham School team, IEE, CEBE team) in June-July 2016. These interviews will further explore the areas identified in the development phase, as well as those highlighted in the pilot stage. In particular, we will explore perceptions of the supply of expertise from the providers'/brokers' viewpoint – who is providing the expertise, level of engagement, nature of expertise. In addition, we will ascertain brokers' views on their training, quality assurance, the service overall and sustainability of the service. We will also explore the estimated cost of their time, training, delivery and any other resources they have provided.

Interviews with research experts (June-July 2016)

We will carry out up to five interviews with experts that have engaged with the brokerage service to examine their role and engagement with the service, if they are satisfied with their participation in the service, whether queries are closely enough linked to their area of expertise, and if they are happy to continue to be involved. We will also explore the estimated cost of their time and any other resources they have provided.

Analysis

Analysing monitoring data

We will undertake secondary analysis of data collected by the service providers/brokers for all pilot schools (31) involved with the service. We will take an interim download of the management information (MI) data in December 2015 to ensure it is providing useful data, and we will update the fields if necessary.

In order to further examine whether there is sufficient provision of academic expertise and the scalability of the service we will use the secondary MI data to: map questions against experts that the service is in contact with; identify gaps; monitor flow of advice; and identify external factors which may influence demand.

Analysing qualitative data

We will analyse qualitative data thematically – organised by the research aims and questions. We will also draw together participant perceptions to produce vignettes and examples of how schools used the service, looking at key features, challenges and perceived outcomes.

Analysing quantitative data

We will analyse quantitative data using topline frequency analyses. For the Teacher Voice survey, we will provide breakdowns by phase (primary/secondary) and by respondent type (senior leader/classroom teacher). For the school survey, we will provide breakdowns by phase (primary/secondary/special), by deprivation (e.g. school level FSM indicators), and by respondent type (senior leader/classroom teacher/other) – all analyses subject to if numbers allow. Due to using selected questions only from the Research Use instrument, the survey dataset will not be suitable for undertaking baseline/end-point factor analyses or using the baseline survey as a covariate in the follow-up analyses.

Through the survey and interview analyses, we will help identify the appropriate outcome(s)/measure(s) that could be used in any further pilot or full trial of the service.

Analysing cost data

We will ask the school team/IEE to provide information about the costs of the service (for example, experts' time, telephone costs, material costs). We will also gather perceptions on costs involved (e.g. time given, time-savings, resources), from the experts who we interview and interviewees in the school sub-sample.

Through all of the data analyses, we will explore the implications of scaling up, and make recommendations for future implementation of the service.

Ethics

Ethical approval

The evaluation will be conducted in accordance with and approved by NFER's Code of Practice. NFER's data protection policy is available at: http://www.nfer.ac.uk/nfer/about-nfer/code-of-practice/nfercop.pdf.

In setting out the roles and responsibilities for this trial, the NFER will draw up a MoU with Sandringham School/IEE/CEBE team. This will include a description of the nature of the data being collected and how it will be passed securely to NFER.

In addition, NFER will provide MoUs to pilot phase schools, explaining the nature of the data being requested of schools and teachers, how it will be collected, and how it will be passed to and shared with NFER.

Reporting

Monthly updates and client meetings

We will provide half-yearly progress updates to EEF; and a version to be shared with the School/IEE team. In addition to the first and second set-up meetings, we will meet over the telephone with the EEF and with the School/IEE team to discuss evaluation progress and formative findings twice over the course of the project e.g.:

- July/August 2015 to feedback on headline findings from the Teacher Voice survey and the development phase, including any key learning points ahead of implementing the pilot service

- June/July 2016 to feedback on the pilot phase (interviews and survey) ahead of final reporting.

Final report (Sep-Oct 2016)

We will provide a final report on the findings in October 2016. This will include: an updated ToC model; headline findings from the Teacher Voice survey; findings from the development phase and how those influenced into pilot implementation; findings from the surveys, interviews and monitoring data; and learning points for any future roll-out of the brokerage service and its further evaluation, including the range of outcome measures that could be used to determine the effectiveness of such a service. The report will be structured around the three main aims – Is there evidence of promise? Is the approach feasible to deliver? Is the intervention ready to be evaluated in a trial?

Timetable

A proposed timeline is presented below.

Month	Activity
Feb-Apr '15	Project setup and 1st and 2nd meetings Construction of Theory of change Devise Teacher Voice questions
May-July' '15	Attend a developer workshop Teacher Voice Panel survey Collaborative development of monitoring data collection tool Interviews with service developers and brokers Develop survey instrument Client telephone meeting Half-yearly progress update
July-Aug''15	Feedback to developers on headline findings from the Teacher Voice survey, the development phase, and any key learning points for the pilot service
Sept '15	Pilot school online baseline survey Attend pilot phase workshop
Dec '15	Interim MI data download
Jan '16	Half-yearly progress update
March – May '16	School telephone interviews / school profiles
June-July'16	Pilot schools follow-up online survey Interviews with research experts Interviews with service providers and brokers Final download of MI data Client telephone meeting Half-yearly progress update
Aug – Sept '16	Analysis of secondary monitoring data Analysis of qualitative data Analysis of quantitative data Analysis of costs data Draft reporting
October '16	Final report to EEF on pilot study

Collaboration

We will work closely with IEE and the Sandringham School team to ensure that the research is carried out in an efficient and robust manner, which complies with ethical guidelines and data protection legislation. We will liaise with them on a range of activities including the engagement of schools and the logging of brokerage service data. We will ensure that the findings from the research activities feed into the development of the service and the

development of any future trial. We will share our project plan and co-develop a risk log to ensure that we have a shared commitment to and understanding of the project activities, timescales and risks.

Delivery Team

The project Director will be David Sims, a Research Director in NFER's Centre for Evaluation and Consultancy. David has extensive experience of directing evaluations for a range of clients including the DfE, BIS and the LGA. David's research portfolio includes a special focus on school improvement support, school collaboration, and system leadership.

The Project Leader will be Pippa Lord, Senior Research Manager in NFER's Centre for Evaluation and Consultancy. Pippa has substantial experience in leading multi-method evaluations and is a member of NFER's Education Trials Unit. She works in the areas of teacher development, arts and STEM education. Pippa will be the day-to-day contact on the project.

Dr Ben Styles, lead statistician on NFER's RCTs will act as a consultant on this project. Ben will advise on the development of the instruments and tools for this evaluation to ensure relevance for the design of any future full trial.

Risks

Risk	Assessment	Countermeasures and contingencies
Insufficient schools recruited to the development and/or pilot phase	Likelihood: low Impact: high	The School and IEE team will recruit 11 schools to the development phase, and a further 20 schools to the pilot phase. The delivery and evaluation team can re-deploy their resources to exploring challenges with engaging with the service, if necessary.
Low response rates/survey attrition.	Likelihood: moderate Impact: moderate	NFER will provide clear information to schools explaining their role in the pilot, and expectations for completing the survey. NFER can offer feedback to schools on survey responses.
Intervention is not developed or piloted well	Likelihood: low Impact: moderate	This will form part of the formative evaluation lines of enquiry, and re-inform the Theory of Change and recommendations for any delivery changes needed.
Researchers lost to project due to sickness, absence or staff turnover	Likelihood: moderate Impact: moderate	NFER has a large research department with numerous researchers experienced in evaluation who could be redeployed.

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