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Evidence-informed teaching: an evaluation of progress in England

Appendices

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Appendix 1: What do we know about effective use of research evidence?

1. Introduction

The aims of this section are to:

- Summarise findings from a review of reviews of evidence-based teaching.
- Summarise findings from recent research not included in these reviews, focusing especially on recent research in the UK with evidence of impact of evidence-informed teaching approaches on teachers or on pupils’ learning.

2. Review of reviews

2.1 Overarching models

In this section the conclusions from a number of recent relevant reviews are presented following an ‘umbrella’ review approach. Langer, Tripney and Gough’s (2016) review of evidence-based approaches to evidence-informed decision making (EIDM) argues that research evidence is only one factor which can influence decision-making in policy and practice. Although a range of interventions and approaches have been developed to cultivate the use of research evidence by decision-makers, they indicate it is still unclear which approaches are effective. Their review had two related stages, the first seeking to identify effective interventions to increase decision-makers’ use of research, the second a synthesis of the broader social science literature relevant to evidence-informed decision-making which might support future interventions in this area. Most of the included studies come from medicine and health related fields, where, arguably, evidence-based decision-making is a more developed field. A few, however, come from other areas such as business, social work and education in schools.

In terms of what is effective in increasing research use by decision-makers, in their synthesis Langer, Tripney and Gough (2016, p.1) indicate that the following strategies have some evidence of effectiveness:

- “Interventions facilitating access to research evidence, for example through communication strategies and evidence repositories, conditional on the

1 "cautious evidence' refers to reviews rated by the authors as having moderate trustworthiness and relevance. 'Reliable evidence' refers to those judged to have high trustworthiness and relevance.
intervention design simultaneously trying to enhance decision-makers’ opportunity and motivation to use evidence (reliable evidence).

- Interventions building decision-makers’ skills to access and make sense of evidence (such as critical appraisal training programmes), conditional on the intervention design simultaneously trying to enhance both capability and motivation to use research evidence (reliable evidence).
- Interventions that foster changes to decision-making structures and processes by formalising and embedding one or more of the other mechanisms of change within existing structures and processes (such as evidence-on-demand services integrating push, user-pull and exchange approaches) (cautious evidence)."

They also identified areas where there was evidence of no effects (p. 2):

- “Interventions that take a passive approach to communicating evidence that only provide opportunities to use evidence (such as simple dissemination tools) (reliable evidence).
- Multi-component interventions that take a passive approach to building EIDM skills (such as seminars and ‘communities of practice’ without active educational components) (cautious evidence).
- Skill-building interventions applied at a low intensity (such as a once-off, half a day capacity-building programme) (cautious evidence).
- Overall, unstructured interaction and collaboration between decision-makers and researchers tended to have a lower likelihood of success. However, clearly defined, light-touch approaches to facilitating interaction between researchers and decision-makers, and engagement in particular, were effective to increase intermediate CMO [capability, motivation, and opportunity] outcomes (cautious evidence).”

In the second stage of the review they argue that interventions and approaches which support the communication of and access to research evidence were only effective to increase evidence use if the intervention design simultaneously tried to enhance decision-makers’ opportunity and motivation to use evidence. From the wider social science literature, they suggest the following as promising approaches (p. 2-4):

- Promote and market behavioural norms.
- Engage in advocacy and awareness raising for the concept of evidence-informed decision-making.
- Effectively frame and formulate communicated messages.
- Design appealing and user-friendly access platforms and resources.
- Build a professional identity with common practices and standards of conduct.
- Foster adult learning.
- Build organisational capacities and support organisational change.
- Use behavioural techniques, including nudges.
- Exploit the potential of online and mobile technologies.
- Institutional frameworks and mechanisms.

Overall, the synthesis focuses on research related to increasing use, but without evaluating the effectiveness of increased use. Although the review focus is broader than within education, schools and teachers were included.

An earlier review by NFER (Nelson and O’Beirne, 2014) was unable to identify many detailed examples of systematic evidence of use of knowledge mobilisation in education, despite systematic searching, and the authors argue that there is a key need for more research and analysis of the strategies that are being used to mobilise knowledge within and for the teaching profession. In particular, they highlight that there is little evaluation of the effectiveness of different approaches to mobilising knowledge or developing the use of research and evidence in schools. They were unable to find any evidence of impact on pupils’ educational outcomes (see below for a summary of more recent studies). However, they also argue that it is important to understand the relative benefits, or the conditions for effectiveness, of different types of approach in order to achieve some degree of comparative understanding across the different approaches. They indicate (p. 21) that some of the issues relate to the supply side or production of research in that research evidence can be:

(1) Poor quality
- Failing to build on previous knowledge
- Too small scale
- Too poor to be replicable

(2) Insufficiently contextualised and/or inaccessible
- Not related to everyday practice in schools
- Relate to researchers’ concerns and not schools
- Have inaccessible language
- Piecemeal, so hard to see the big picture

(3) Insufficiently supportive of implementation
- Poor engagement with non-academics
- Unsupported engagement
- Flawed interpretation of findings

Their review draws on Becheikh et al.’s (2009) synthesis of models with a six-step knowledge transfer process going from the generation of knowledge by researchers to its utilisation by users. These steps are knowledge generation, adaptation, dissemination, reception, adoption and utilisation. The three first steps are commonly attributed to researchers, whereas the other three steps concern the users. Whilst
these stages may be helpful in conceptualising aspects of the stages of the process. This is a somewhat problematic model as it assumes a one-directional model of knowledge mobilisation and that researchers’ concerns and motivations for engaging in research are aligned with practitioners concerns and needs. As Goldacre (2013) and Hargreaves (1996) have previously argued, an alignment of research and practice is needed earlier in the knowledge mobilisation process, otherwise the responsibility is placed entirely on the practitioners as needing to change and develop, based on a deficit model of practice.

Levin’s (2013) model, by contrast, conceptualises these as inter-related processes.

Figure 1: Levin’s (2013) model of knowledge mobilisation structures

Dagenais et al.’s (2012) systematic and comprehensive review of the determinants of use of research-based information by school practitioners classified research use as general or local and identified the following features from the studies they reviewed in terms of the characteristics of the research, the communication processes, the practitioners and the schools involved. The team argue that these dimensions are central to understanding the factors that affect practitioners’ decisions to become involved in change processes connected with evidence use and that also help to sustain their involvement in order to develop professional performance.

Table 1 Research characteristics (adapted from Dagenais et al. 2014)

<table>
<thead>
<tr>
<th>Research Characteristics</th>
<th>Characteristics of communication</th>
<th>Practitioners’ characteristics</th>
<th>School characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible and timely</td>
<td>Facilities</td>
<td>Skills and competencies</td>
<td>Enjoys external support</td>
</tr>
<tr>
<td>Objective and true</td>
<td>Access to research and data</td>
<td>Prior participation in research</td>
<td>Wants evidence for decision making</td>
</tr>
<tr>
<td>Easy to</td>
<td>Quality</td>
<td>Attitudes towards</td>
<td>Encourages and</td>
</tr>
</tbody>
</table>
### 2.2 Research characteristics

Dagenais et al’s (2014) characteristics represent practitioners’ perceptions of the relevance of the evidence to their practice and these drive practitioners’ decisions about research use. These characteristics also relate directly to the supply side issues identified by Nelson and O’Beirne (2014). However, the extent to which people’s perceptions affect action can be considerable. Dagenais et al. (2008) found that, among various factors, practitioners’ opinions about research emerged as the strongest predictor of their use of research-based information. Other features identified as important include clarity, timeliness, relevance, usability, amenability of research to action/transfer, applicability and sophistication in terms of how well the research-based information aligns with classroom needs and local contexts (Dagenais et al. 2014, p 299-300).

Teachers value research when it matches their professional experience and can be translated into tangible and practical outcomes in terms of classroom practice, interaction with pupils and/or specific methods or techniques for classroom instruction. Access to research and evidence still remains an issue as teachers prefer information that is readily accessible and applicable to their context (for more about practitioner perspectives see Williams and Coles, 2003; 2007) and which

<table>
<thead>
<tr>
<th>Research Characteristics</th>
<th>Characteristics of communication</th>
<th>Practitioners’ characteristics</th>
<th>School characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>understand and implement</td>
<td></td>
<td>research</td>
<td>supports initiative</td>
</tr>
<tr>
<td>Connected to school/classroom context</td>
<td>Collegial discussions</td>
<td>Willingness to innovate</td>
<td>Has prior experience with initiatives</td>
</tr>
<tr>
<td>Relevant</td>
<td>Collaboration with researchers</td>
<td>Self-efficacy and commitment</td>
<td>Staff capacity and support to use research</td>
</tr>
<tr>
<td></td>
<td>Sustained collaboration via networks and partnerships</td>
<td>Experience</td>
<td>Encourages internal collaboration</td>
</tr>
<tr>
<td></td>
<td>Media</td>
<td>Prior coursework in research methods</td>
<td>Prioritises appropriate professional development activities</td>
</tr>
<tr>
<td></td>
<td>Content area taught</td>
<td>Needs innovation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training on how to make use of research</td>
<td>Is committed to organisational learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvement in research</td>
<td>Allocates time and resources, including available technology</td>
<td></td>
</tr>
</tbody>
</table>

Source: Dagenais et al. (2014, p. 297-299)
makes minimal demands on time, and does not require special knowledge or search skills (see Higgins and Katsipataki, 2016, for a discussion of the tension between accessibility and accuracy of research findings). When teachers actively seek out research they tend to do so with a specific issue or question in mind (Drill et al. 2009).

2.3 Characteristics of communication processes

Communication processes in terms of relationships between researchers and potential users are also important (Dagenais et al. 2012). Interaction between researchers and practitioners has been reported as ensuring more relevant and contextualised research results which can increase both the relevance of the research to the practitioners and, consequently, the likelihood that they will use it. Networks and partnerships are therefore likely to support the effective use of research and being part of such a network supports practitioners in developing a sense of ownership and a positive attitude with regard to the research products (see also: McLaughlin et al. 2004; Gu et al. 2014). Direct involvement in the research process also tended to increase research use. The choice of media for the communication of research-based information emerged as an important determinant of use with the internet and online access replacing print over the last decade (Dagenais et al. 2012, p 300-103: see also Procter, 2013 and Blamires, 2015 for some of the challenges in developing effective online dissemination).

2.4 Practitioners’ characteristics

Evidence use is also influenced by characteristics of the individuals involved (Dagenais et al., 2014). Williams and Coles (2003; 2007) reported that the overall beneficial impact of research on practice could be improved by greater knowledge and understanding about the products of research. An individual’s capacity to use evidence to inform their practice and the skills needed to do so are therefore important prerequisites for practitioner engagement with educational research. This skill set includes, but is not limited to, the ability to formulate questions about problems encountered in practice and the ability to find solutions by locating research, appraising it critically, inferring from data, applying findings to practice and conducting one’s own research projects (see also Drill et al. 2009). Teachers’ capability to interpret educational research in relation to their own context is therefore central. Practitioners’ motivation to use evidence from research and their engagement with this process is influenced by a number of individual variables, including self-efficacy and commitment, their prior involvement in research, any previous research training and the length of their experience (Dagenais et al. 2014, p 301).
2.5 School characteristics

The organisation, its structure and culture, particularly procedures and incentive systems, all contribute to a school’s capacity to learn from research and evidence. Aspects of leadership, such as openness to initiatives for change, support for collaboration and collegiality, providing time and appropriate resources (including technology) as well prioritising professional development of the teaching staff, are all indicated as important (see also Maxwell et al. 2015). The school’s need for innovation and evidence-based decision-making appear to be the critical prerequisites. But for a school to succeed, two elements also appear vital: prior experience with initiatives and staff capacity to deal with the change. Because schools are embedded in a larger system, any engagement in the use of research-based evidence can be affected by a number of system-related factors, including political concerns, public opinion, and resources and funding (Dagenais et al. 2012, p 300-103).

2.6 The process of teachers’ engagement with evidence

What becomes clear from the analysis of these reviews is the importance of the processes by which teachers engage with or become engaged with research and evidence. This needs to be understood in the light of Levin’s model of the interconnected nature of aspects involved in knowledge mobilisation, or perhaps understood as ecology of knowledge and evidence.

2.6.1 The role of professional development

Cordingley’s (2013) review summarises findings from several systematic research reviews about the contribution of research to effective continuing professional development (CPD) and the impact of these activities on teachers’ professional learning and educational outcomes for pupils. It therefore presents a perspective on evidence-based teaching through the lens of professional development and learning. It starts with a review of how teachers engage in and with research as part of CPD (see Figure 2 below), how teachers and researchers shape professional learning activities and then identifies key processes linked to positive outcomes for teachers and learners. Finally, it also discusses how different contributions from research and evidence can be developed to make a more explicit contribution to CPD. The review maps studies in relation to two dimensions. These are (1) teachers engaging in and/or with research and (2) the extent to which the research is researcher-led or teacher-led and conceptualises these as key variables in understanding impact.

Cordingley argues for the importance of structured peer support for teachers, professional dialogue and the development of more proactive approaches to professional learning. She highlights the importance of CPD facilitators, including
researchers, in developing the growing independence of teachers in engaging in and with research (Cordingley, 2013, p. 9). Cordingley also highlights some of the inherent challenges in the relationship between practice and evidence from empirical studies. Systematic reviews, for example, work to different timescales from practice. Evidence necessarily lags behind policy and practice and often the immediate interests of teachers. The importance of the role of research evidence in continuing professional development and learning for teachers is also picked up in Cordingley and colleagues’ more recent review for the Teacher Development Trust (Cordingley et al. 2015; see also Maxwell et al. 2015 for a perspective from Teaching School Alliances).

Figure 2: Cordingley’s (2013) map of teachers’ engagement in and with research

Leat et al.’s (2014) review of teachers’ perspectives on research engagement adds a further note of caution and an additional dimension to Cordingley’s map. They focus on teachers’ points of view in relation to engagement in and with research and conclude it is somewhat elusive in the literature. They note that teachers are usually positive towards their research engagement, particularly so when this is a practitioner undertaking research into their own practice. They highlight McLaughlin et al.’s (2004, p.7) distinction that there are three purposes evident in the teacher research tradition: (1) research and enquiry undertaken for primarily personal purposes; (2) research and enquiry undertaken for primarily political purposes; and (3) research and enquiry undertaken for primarily school improvement purposes. But they note that these are interconnected and often not easily distinguishable. The consequence, they argue, is that there is a bias in the literature that over-represents the traditions of school improvement and tested pupil outcomes, whilst neglecting teachers’ concerns about curriculum and pedagogy and their professional values underpinning these.

Hemsley-Brown and Sharp (2003) identify differences in the way that research knowledge is constructed in the social sciences and the contestability of research findings particularly in relation to the context, generalisability and validity of the
research. As a result, they argue that the development of communication networks, links between researchers and practitioners, and greater involvement of practitioners in the research process, have emerged as strategies for improving research uptake.

The challenge with these perspectives is that they elide some of the complexity of the issues in the different stages of the process, which starts with access and awareness and implies a linear process through to engagement and use. These reviews describe aspects of this process, but only partially and without a coherent model of, or logic for, evidence-based practice in terms of its impact on outcomes for learners. We can conclude from the reviews that simple linear models are too limited to capture the range of ways that research evidence may support improvement in learning outcomes and that we understand the importance of some key steps, particularly the relationship between awareness, access and engagement. One key assumption is that informed and deliberate research is necessary, but may not be sufficient to bring about improvement. However, it is not clear that this is always necessary. It is clearly desirable for a model which seeks to develop the professionalism and expertise of teachers in terms of improving their knowledge of and therefore the sophistication of their choices about how to address the current learning needs of their students effectively, but the extent to which practitioners need to understand the robustness of the underpinning research is not clear. It seems likely that a range of approaches is needed. In some areas, it may be possible to develop research-based guidelines which have a good chance to support improvement and which are sufficiently specific and applicable to be of benefit. In other areas, the match of specific findings to the teaching and learning context will be more complicated and will depend on effective diagnosis of the problem which can be helped by research. Even here the answer may not be simple. Evidence may indicate that a change in pedagogy, perhaps about the quality of feedback, is likely to improve learning outcomes, on average. For this to be successful it needs to improve the quality of feedback in a particular teacher’s classroom (i.e. enhance their skills), for particular pupils (who were previously not receiving feedback which was as effective) and in a specific area of the curriculum (such as aspects of their writing). The recontextualisation of the research is often overlooked (see Brown & Rogers, 2015 and Sheard & Sharples, 2016 for the importance of this dimension).

A second assumption which is often implicit is that all research will help all teachers and that research use necessarily guarantees improvement. This is clearly unwarranted and it seems more likely that some research will help some teachers, with the challenge being to identify which research will help which teachers, and in which contexts and professional circumstances. Large-scale randomised trials generate evidence about what was effective, on average, compared with what was happening in the comparison classes, on average. Observational studies identify the typical development of learners or the typical associations with other covariates. This
is not a trivial point. The more effective a teacher or school, the less likely that ‘average’ gains will help to bring about improvement. This limits how effective evidence use is likely to be and argues for an expertise model of evidence use to improve informed decision-making by practitioners.

3. Recent studies of evidence use in schools

3.1 Introduction

The development of evidence-based approaches in schools reflects an international trend towards evidence-based approaches which has been gaining momentum over the past ten years, particularly from a policy perspective. Universities are now judged on the impact of their research, and the development of digital technologies has increased the availability of and access to educational research findings, increasing the supply. In the UK, it has also been supported by practitioners through initiatives like ResearchED (Bennett, 2015) which has increased the demand for research and evidence. A number of research studies and evaluations of evidence-based approaches in schools have been completed since Dagenais and colleagues’ (2012) review and Nelson and O’Beirne’s (2014) systematic review. These are summarised in the section below. The inclusion criteria identified studies which looked for and/or collected evidence (whether they found it or not) of changed teacher behaviours and/or pupil learning outcomes as a result of EBP.

The Education Endowment Foundation (EEF) was established in 2011 with a £125 million endowment from the UK Government. It invests in evidence-based projects which focus on tackling the attainment gap for disadvantaged pupils. It draws on evidence summarised in their online ‘Teaching and Learning Toolkit’ to test research-based ideas rigorously in English schools (over 7,500 schools to date, involving 750,000 pupils). The findings from independent evaluations of these projects are then fed back into the Toolkit to update it, disseminated and, where successful, used to design campaigns to promote evidence-based approaches in schools. Sixty research reports have been published up to August 2016 with a further 67 projects underway.

In 2014, the EEF committed £1.5 million to five projects to explore the impact of research use in schools, evaluated through impact on pupils’ attainment. So far two of these have reported (Speight et al. 2016), with three due to report in Autumn 2017 and a further project commissioned into the use of research tools to support literacy in the early years. Early indications suggest that although these approaches to promote research use may have promise, particularly in terms of developing awareness and engagement, it is challenging to demonstrate a causal link between evidence use and improved outcomes (Speight et al. 2016). As Langer, Tripney and
Gough (2016) noted in their review, we still lack evidence on the relative effectiveness of different approaches. There is some evidence that simpler and more defined interventions have an increased likelihood of impact (e.g. Levin et al. 2011) so in the short term, research which improves our understanding of simple causal mechanisms, like the EEF research-use projects, may help to design larger studies of more complex interventions “whose causal chain is difficult to disentangle at this early stage of research knowledge” (Langer, Tripney & Gough, 2016, p. 4).

A number of other recent reports of evidence use relate directly to policy initiatives. The National College for Teaching and Leadership (NCTL), an executive agency of the Department for Education (DfE), commissioned a series of projects to support the development of aspects of a school-led system. One of these, “Closing the gap: test and learn” trialled seven evidence-based interventions simultaneously using a collaborative approach across clusters of schools, led by teaching school alliances. It was commissioned as an extended partnership involving CfBT Education Trust\(^2\) Centre for the Use of Research and Evidence in Education (CUREE), Oxford and Durham Universities (Churches, 2016)\(^3\). In the first year, 387 schools took part in the trials (15,292 pupils). In the second year, 286 schools (5,530 pupils) took part in the collaborative trials. In the second year of the project a group of 50 teachers were also trained to conduct micro-trials to test hypotheses about the effects of a range of teaching and learning approaches in their classrooms which they identified as professionally valuable, similar to the model used by Coe, Fitzgibbon and Tymms (2000). A number of the aims of the project relate to engagement in research, the use of robust evidence to improve pupil outcomes and a broader aim to complement work by the Education Endowment Foundation (EEF) and other efforts to develop an evidence-informed teaching profession (p. 13). The findings indicate that schools have the capacity to engage with and in research-based improvement initiatives, to take the lead on aspects of research management and implementation, and that improvement in attainment from system-led research approaches is possible, but not guaranteed.

Two other recent NCTL projects are relevant to the development of EBT: “Approaches to research and development for ‘great pedagogy’ and ‘great CPD’ in teaching school alliances” (Maxwell et al. 2015) and “Teaching Schools Evaluation: Emerging issues from the Early Development of Case Study Teaching School alliances” (Gu et al. 2014). Although not evaluating the impact of EBT initiatives

\(^{2}\) Now the Education Development Trust.

\(^{3}\) Another NCTL project “Evidence-based teaching: advancing capability and capacity for enquiry in schools” is reporting in 2017. Twenty teaching school alliances are working with Manchester Metropolitan University to identify which approaches to supporting evidence-based teaching (EBT) have the most impact on TSAs. The project looks specifically at developing staff capability and capacity, and under what conditions. An interim report (Hammersley-Fletcher et al. 2015) reporting on the approach and baseline survey findings is available.
directly, they highlight the importance of effectively embedding research, development and evidence-based practice at school level and indicate the importance of leadership and the role of continuing professional development and teachers’ learning in successful uptake.

3.2 School-university partnerships

Another strand of the development of EBT is through school-university partnerships. These have a longer history of reflecting relationships between researchers and teachers with the view to developing practice and applying research findings from earlier studies. Partnerships between universities and schools with a research focus have changed from informal contacts to support and apply individuals’ research, or supporting research teams with their own research, to more organised approaches to support schools and school networks more systematically to bring about improved teaching and learning (Coburn et al. 2013).

Recent work in the UK highlights a number of these challenges, but also illustrates the potential of such partnerships. Brown and Rogers (2015) used a knowledge creation activity as a way of developing evidence-informed practice amongst a learning community of 36 early years practitioners in London and identified evidence of whether practitioners were developing expertise as evidence users (p.190). The findings suggest that knowledge creation activity provides an effective way of communicating research and developing practitioners’ professional skills.

Cain’s (2015) small scale study of evidence use by eight teachers in one secondary school further exemplifies the challenge of identifying and using applicable findings from research. Teachers were given research findings about teaching gifted and talented students, and were supported, over a 12-month period, to incorporate findings into action research projects of their own devising. Findings suggest that teachers developed propositional knowledge into practical knowledge by interpreting the research in the light of their own context and experience, but that in the process this changed the nature of that knowledge.

Sheard and Sharples (2016) evaluated the effectiveness of a five-stage process of engagement with evidence-based programmes and practices as a management tool for school leaders to address their schools’ improvement agendas. The findings describe the change process in three primary schools over a one-year period and the enablers and constraints associated with the concept of evidence-based practice as a driver for change in teaching and learning. The role of the enquiry, where practitioners and researchers are equal partners in the learning process, is discussed and the relevance of this to managing school improvement through research use rather than direct application.
Internationally, Ecalle and colleagues (2015) report the findings of a large scale randomised controlled trial in France involving 3560 children using evidence-based literacy practices. There were significant gains in the target domains. In a randomised controlled trial with 3569 kindergarten children, evidence-based literacy practices (EBLP) were proposed by teachers to an experimental group (EG). A control group did not receive any specific interventions during the same period. The EBLP related to the alphabetic code, phonological awareness and oral comprehension. Analyses based on propensity scores showed significant gains in the targeted domains and in pseudo-word reading in EG after comparison between the two groups. The gains were higher for children who had the lowest scores. However, no effect was observed in word reading and vocabulary. EBLP could be a valuable pedagogical tool.

3.3 A complex ecology

Overall the range of approaches, models and descriptive studies makes it challenging to summarise and define what evidence-based approaches are, so drawing conclusions about effective approaches is even more difficult. Perhaps the most helpful perspective is to consider it as a system with its own ecology (Godfrey, 2016) in which effectiveness can be evaluated once the aims and purpose are clear, but from which any more general conclusions need to be tempered by the contexts from which they are drawn (see Figure 3).

4. Summary

Evidence is a contested term and the relationship between research and practice is complex. Clarity is therefore needed in understanding what people mean by the terms involved. This is particularly about the nature of the evidence and the kinds of research which support evidence use by teachers.
Evidence can be used in very different ways. This ranges from seeking to replicate faithfully the behaviours or practices which were shown to be causally linked with improved outcomes, through more interpretive re-application of research-based principles and practices seeking to achieve the intended outcomes from previous research, to broader, more creative research-inspired approaches. The research-practice divide has traditionally been seen as a unidirectional model, with evidence flowing from research to practice. More recent work has identified the importance of seeing this as a reciprocal relationship with questions arising from practice and research knowledge being developed in professional contexts, as well as research being able to inform practice-driven concerns. Research brokerage therefore remains an important challenge, as identifying specific and robust research which might address the needs of a particular school, teacher or pupil is challenging, even for experts in the research community. This highlights the importance of relationships and processes.

The knowledge base about teachers’ awareness, engagement and use of research is developing rapidly, in a similar way to developments in other professional fields. The knowledge base draws on research about evidence-informed decision-making in other fields, particularly medicine and health-related professions, but also increasingly in education. Wider social science knowledge about organisational and individual behavioural change could usefully inform approaches in education. However, the available research about the effects of evidence-based teaching is still limited and relies mainly on descriptive accounts and opinions, often about evidence use in optimal circumstances. Caution is therefore needed in interpreting this information in terms of wider uptake. There are only a few studies which have sought to link evidence use with changes in teachers’ practice and fewer still which robustly establish a link between evidence use and improved outcomes for learners in an organisational setting. We still know relatively little about the effects of evidence-based approaches on schools, teachers and pupils, and how to increase the likelihood of better outcomes for learners in particular. This highlights the importance of a practice and professional focus, which includes an organisational dimension.

In terms of current research in education, there is a tension between research that aims to demonstrate a link (such as through controlled trials of evidence use) which inevitably simplifies the complexity of interpreting; and applying evidence from one educational context to another setting which tends to seek general rather than specific approaches for improvement. In practice, research is rarely ‘applied’ in a linear way by teachers or schools: research implications are unlikely to be clear-cut and must be contextualised and combined with practice-based knowledge as part of a wider professional learning process. There is no consistent logic model or theory of the way or ways in which evidence-based practice might lead to more effective teaching and learning. Some assumptions about the likelihood of benefit may limit
the applicability of findings from current studies. This highlights the importance of a research focus in developing evidence-based teaching.

Strategies and structures to support the development of evidence-based teaching need to be multi-dimensional and are likely to include features related to (1) the nature of the research and evidence itself, (2) effective communication processes whilst taking into account variation in (3) teachers’ needs, experience and skills as well as (4) the characteristics of the school contexts in which they work so as to increase the probability of benefit from evidence for improved outcomes for learners. This highlights the importance of understanding the wider context, which is often implicit or even hidden in the existing reviews, which seek to identify common features and patterns across contexts.
References


[http://dx.doi.org/10.1080/19415257.2014.963884](http://dx.doi.org/10.1080/19415257.2014.963884)


Appendix 2: Content analysis detailed findings

The Content Analysis examined the websites of a selection of Teaching Schools that had received funding for R&D (Research and Development) as well as a random selection of schools over a two-year period. Analysing website content and the key documents included on these sites, such as school and Pupil Premium improvement plans, can provide a strong indication of the values, priorities and ways of working for a particular school or Teaching School Alliance. Of course, it is possible that some schools and Teaching Schools might value EBT in practice, but not choose to actively highlight that on their website, especially where the site is aimed primarily at a parent and Ofsted audience, rather than other schools. This strand of the content analysis is therefore seen as indicative only and should be read alongside the wider evaluation findings.

In Section 3.2.2 of the main report we have included the findings from the content analysis of the websites of the 15 case study schools alongside the detailed qualitative findings, in order to show how they compare with the random sample and Teaching Schools discussed in this section.

Tables 2 and 4 below give the percentages of Teaching Schools (Table 2) and randomly-selected schools (Table 4) scoring High, Medium, Low or None in each of the five areas assessed in year two of the evaluation. These were:

- Exhibits awareness of research use as part of teaching.
- Recognises the value of quality evidence.
- Promotes why it should be used.
- Promotes how evidence should/could be used.
- Promoting evaluation – how impact of use is assessed.

Tables 3 and 5 show the percentage change in each area between the first and second years of the evaluation for each group.

A number of overall findings stand out:

**Teaching Schools appear more engaged than other schools**

As a group, Teaching Schools score higher in all five areas than the randomly selected group. In addition, the second year analysis indicates that greater numbers of Teaching Schools are demonstrating a commitment to evidence use on their websites over time.
Teaching Schools score relatively highly in terms of ‘Exhibiting awareness of research use as part of teaching’ (43% scored high or medium), ‘Promoting why evidence should be used’ (50% - up from 29% in Year 1) and ‘Promoting how evidence should/could be used’ (54% scored high or medium). Teaching Schools scored lower on ‘Recognises the value of quality evidence’ (11% high or medium) and ‘Promoting evaluation – how impact of use is assessed’ (11% high or medium), although both areas had improved from Year 1.

The documents accessed from the highest scoring Teaching School websites indicate that EBT is typically linked to school improvement and CPD and training activity. In exemplar Teaching Schools:

a. there is engagement in a significant range of local, national and international projects, including with the EEF, organisations such as SSAT and CfBT/EDT, and HEI partners;
b. schools often follow a clearly articulated cycle of research, action and evaluation;
c. specific roles are often allocated to research brokers within schools, and these roles are viewed as central to the school becoming research engaged;
d. bursaries for research projects are offered in two of the high scoring randomly selected schools; and

e. there are extensive EBT-related professional learning opportunities for staff.

However:

**Many Teaching Schools appear not to be promoting or modelling use of research evidence**

Significant proportions of Teaching Schools (between a third and four-fifths across the five areas) are not promoting or modelling the use of evidence at all on their websites. The two areas where Teaching Schools score lowest are ‘Recognising the value of quality evidence’ (82% None) and ‘Promoting evaluation – how impact of use is assessed’ (80% None), perhaps suggesting that Teaching Schools may need more support to develop these more challenging aspects of knowledge mobilisation.
Furthermore:

The vast majority of randomly selected school websites displayed no engagement with evidence.\(^4\)

Moreover, this picture did not change between Years 1 and 2 of the study.\(^5\) The only area where the randomly selected school websites score slightly higher is 'Promotes how evidence should/could be used', where one in ten websites are scored Medium.

<table>
<thead>
<tr>
<th>Score</th>
<th>Exhibits awareness of research use as part of teaching</th>
<th>Recognises the value of quality evidence</th>
<th>Promotes why it should be used</th>
<th>Promotes how evidence should/could be used</th>
<th>Promoting evaluation – how impact of use is assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>17%</td>
<td>0%</td>
<td>15%</td>
<td>28%</td>
<td>1%</td>
</tr>
<tr>
<td>Medium</td>
<td>26%</td>
<td>11%</td>
<td>35%</td>
<td>26%</td>
<td>10%</td>
</tr>
<tr>
<td>Low</td>
<td>26%</td>
<td>5%</td>
<td>6%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>None</td>
<td>30%</td>
<td>82%</td>
<td>43%</td>
<td>32%</td>
<td>80%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Exhibits awareness of research use as part of teaching</th>
<th>Recognises the value of quality evidence</th>
<th>Promotes why it should be used</th>
<th>Promotes how evidence should/could be used</th>
<th>Promoting evaluation – how impact of use is assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>High or medium</td>
<td>-2%</td>
<td>7%</td>
<td>21%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Low</td>
<td>8%</td>
<td>5%</td>
<td>6%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>None</td>
<td>-8%</td>
<td>-14%</td>
<td>-28%</td>
<td>-16%</td>
<td>-10%</td>
</tr>
</tbody>
</table>

\(^4\) The highest scoring schools from the random selection are actually Teaching Schools, since these were not excluded from the selection.

\(^5\) The variations in score here should not be regarded as significant. One of the two website assessors changed between Years 1 and 2 of the evaluation, possibly introducing differences in inter-rater reliability despite efforts to mitigate this risk.
Table 4 Overall findings for Random Selection of Schools (%)

<table>
<thead>
<tr>
<th>Score</th>
<th>Exhibits awareness of research use as part of teaching</th>
<th>Recognises the value of quality evidence</th>
<th>Promotes why it should be used</th>
<th>Promotes how evidence should/could be used</th>
<th>Promoting evaluation – how impact of use is assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Medium</td>
<td>1%</td>
<td>0%</td>
<td>2%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Low/None</td>
<td>96%</td>
<td>99%</td>
<td>97%</td>
<td>89%</td>
<td>97%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5 Randomly selected schools: Difference between year 1 and year 2 scores (%)

<table>
<thead>
<tr>
<th>Score</th>
<th>Exhibits awareness of research use as part of teaching</th>
<th>Recognises the value of quality evidence</th>
<th>Promotes why it should be used</th>
<th>Promotes how evidence should/could be used</th>
<th>Promoting evaluation – how impact of use is assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>High or medium</td>
<td>-1%</td>
<td>0%</td>
<td>-2%</td>
<td>-2%</td>
<td>1%</td>
</tr>
<tr>
<td>Low/none</td>
<td>0%</td>
<td>-1%</td>
<td>1%</td>
<td>3%</td>
<td>-2%</td>
</tr>
</tbody>
</table>
Appendix 3: Research tools

3.1 Year 1 Research Tools

Evidence-based teaching: Draft EBT Panel Interview Schedule: Head/Senior leader

1. Introduction
Thank you for agreeing to be part of our EBT panel. This interview is part of an evaluation, commissioned by the Department for Education (DfE), that aims to make an assessment of progress towards a system within which the teaching profession can improve practice through the rigorous use of robust evidence. The research is being undertaken by independent researchers at the Centre for Education and Inclusion Research at Sheffield Hallam University, with colleagues at Durham University and the Institute of Education, London.

From all the schools volunteering to take part in the panel we have selected a range of schools with varying levels of current engagement in EBT and differing characteristics such as school phase and location. The data from the interview will be analysed together with data from other members of the teacher panel and presented in a report that will be available on the DfE website. We may also use the data in professional and academic publications. You will not be named in any publication.

Check consent - referring to information sheet/consent form -if consent not already provided by email.

Check permission to record.

2. About you and your school

NB Build on information from Survey Monkey/ data dashboard/ Ofsted report while asking these questions

1.1 Please describe the main characteristics of your school

Prompts: size; age phase; catchment/pupil population; achievement; Ofsted, main priorities for improvement

Probe: to establish if under particular pressures re Ofsted {to see if this has any relationship with school approach to EBT}

1.2 Tell me a little about yourself and your role:

Role/ Number of years in role /at this school/ post degree qualifications and approximate dates - masters? / NPQH/ other?

3. 'Evidence' and 'evidence-based teaching'

{Establish the definition of evidence/ EBT being assumed in the following questions and beliefs about and attitudes towards EBT. This section also contains questions that relate to the engagement section of the matrix of engagement}
3.1 (E) Can you think about an aspect of the school's teaching and learning practices that you have been involved in changing in some way in the past year:

- What led you to making that change?
- In what ways (if any) did you draw on evidence in making that change?
  
  **Probe:** the role of evidence in informing that decision?/ what they are counting as evidence/ at what points evidence is seen to be useful/important e.g. to understand the problem, identify an innovation etc - for what purposes

  {Note: this question is intended to get a sense of the way in which the interviewee understands 'evidence' and evidence-based teaching - in a way that does not lead them to assumed 'desired answers'}

3.2 What do you understand 'evidence-based teaching' to be?

  **Probes:** what counts as evidence and what doesn't? /how is EBT practised? / can/ in what ways can research impact on practice?

1. 'In the questions that follow we are using the term 'evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews -such as those produced by the Sutton Trust, EEF and John Hattie; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry.'

3.3 (E) How important do you think it is to use evidence to inform teaching in your school?

  **Probe:** why do you think it is important or why not? / what is it important for? / what is it not important for/? how important compared to other ways of developing your practice? /

3.4 (E) If I had asked you how important evidence was two years ago would your answer have been the same?

- Follow-up-if changes - what has led to you changing your opinions on this?

3.5 (E) Is there any external research you have come across that has had a significant impact on your school? i.e. changed the way you/others think and/or act? if so, can you explain how and why it came to have a significant impact

  **Probe:** why do you think this research had an impact on you? - e.g. what was it about your context, the research and/or you or other factors that led to this impact?

4. School approaches to EBT

4.1 (All) On a scale of 1-10 how well embedded do you think EBT is in the work of the school? Where 1 is not at all and 10 is fully embedded?

  **Probe:** reasons for rating given

4.2 Does the school have any policies or guidelines on evidence-based teaching? -if so, what are the main strategies?

  **Probe:** is it built into the school development plan in any way?
4.3 (All) What expectations (if any) are placed on teachers in the school to engage in EBT? / what are they expected to be doing?

Prompts

- how many/what proportion of staff in what roles are expected to directly access evidence? - through what processes does this happen?
- in what ways are staff expected to use evidence in planning and delivering teaching?
- how many/ what proportion of staff are expected to engage in undertaking research - through what processes does this happen?
- how are these expectations communicated? - (e.g. school policy, championed by a senior leader, championed by interviewee, middle leader responsibility)

4.4 (All) What structures, systems or processes support teachers in your school to implement EBT?

(e.g. evidence/research champions; JPD and research groups that engage with evidence; leadership/departmental/team meetings, agenda items that focus on evidence/ PD, middle leader roles, research advocates? time for teachers to engage with research? links with academics? research on websites; sponsor MAs; information for parents)

Professional development support?

Probe: how does this come about and frequency

4.5 (All) What do you and other senior leaders do to promote and support EBT?

Prompts

- advocate for EBT/ promoting/championing use?- how do you go about this?
- supporting middle leaders-in what ways /what do you do?
- other?
  Probe : what appears to be more or less effective in implementing EBT

4.6 (E) What (if anything) do you expect middle leaders to do to support teachers to engage in EBT?

- promoting EBT? / supporting teacher PD / leading evidence-based innovations etc.?/ all middle leaders or some middle leaders roles? - rationale for this?

5. Awareness

5.1 (A) How are teachers in your school made aware of relevant evidence?

Probe: who tells them -how?/ are they expected to find out about it themselves - through what processes?

5.2 (E) What (if any) guidance is given on assessing whether they can rely on the evidence they find?
6. Engagement

6.1 (E) Do you find that the research evidence available to your school is presented in a clear and accessible way?

Prompts - can you give some specific examples of evidence used and how accessible you find it? /variation across different sources

6.2 Are there any teaching and learning issues where the school has looked for evidence but were not able to find anything relevant or useful?

Probe: pedagogical focus/ wer looked / what found - why not relevant and/or useful

6.3 What engagement (If any) do governors have in either promoting or using evidence?

Prompts: Do they ask for evidence at governor’s meetings?/ Do they seek to satisfy themselves that the head is basing decisions on evidence? Examples?

7. Use of Evidence

7.1 (U) How do teachers in the school go about using evidence?-for example if they find a piece of useful evidence what do they do with it?

Probe: what is the process/ who is involved/ how does it come about?/ variation in approaches -and if so rationale for varied approaches {unpicking their theories of change}; any tools used across the school; any specific school evidence sources e.g. subscriptions -partnerships with HEIs?/ relationship to other ways of improving things?

7.2 (U) Do teachers in your department/team engage in undertaking research/enquiry to develop practice? If so tell me what you do and how you go about this.

Prompts: who is involved? - individuals/ teams/ whole school/ network?;what is the process? (and where is evidence used in those processes/ how is it perceived that this will improve outcomes)? what tools/approaches e.g. EEF DIY evaluation toolkit; enquiry model -other? who initiates /drives this?/ relationship to other ways of improving things?

7.4 (U) How confident as a school are you that you can choose the most innovations/ interventions to test out to improve pupil outcomes?

Probe: Check relationship of confidence to confidence in using evidence (e.g c/f practice knowledge);

8. Enablers and barriers to EBT in the school

8.1 (U): How well equipped do you feel you and your SLT are to support EBT in your school?
Prompts:
- areas of confidence/ areas less confident
- what does well equipped mean?

8.2 What support do you/ other senior leaders get to implement EBT?

(e.g. from EEF/ NCTL/ networks /other sources) - how does this come about?/ what are the processes

Probe - what forms of support have been effective in enabling you to lead EBT - what is it about those forms of support that has made them effective?

8.3 On a scale of 1 to 10 -tell me whether you think your school culture (i.e ‘the way we do things round here’) is evidence friendly - 1 is not at all and 10 is we talk about and use evidence all the time

Prompts:
- tell me more about your reasons for giving this score
- who champions using evidence in the school? -what do they do?
- what conversations do you hear about evidence?

8.4 What factors support the implementation of EBT in your school?

Probes: school-culture; staff attitudes; key enthusiasts; links with HEIs; links with other schools; other;

8.5 What factors hinder the implementation of EBT in your school?

Probes: school-culture; staff attitudes; availability of research, accessibility of research; other;

8.6 What would enable the school to further embed EBT?
- e.g. DfE actions (see logic model); school actions; MAT and/or TSA actions; Ofsted actions

9. Cross-school activity

9.1 Does your school work with other schools to share educational research?

Prompts: how does this come about- what are the processes?; why doyou do this? /who is influential in making this happen? what triggers this happening? /scale of this - how many schools/ how frequently? / key foci/ are you working collaboratively to understand research -and if so how what are the processes -what do you talk about - give an example?

9.2 Does your school work with other schools to undertake research/ collaborative enquiry?

Prompts: how does this come about- what are the processes? ; / why do you do this? who is influential in making this happen? what triggers this happening? /scale of this - how many schools/ how frequently? / key foci/ is the activity funded by external agencies e/g NCTL? - if not how is it resourced?
10. Impact

10.1 (U) Does the school evaluate the effectiveness and impact of EBT?

*Follow on questions: how is this done?/ what have been the main findings so far?*

10.2 (building on previous question) Are you able to point to any specific outcomes your department/team's engagement in EBT?

*Prompts:*

- *For teachers* - e.g. more confident, deeper understanding; able to justify your practice to others? how did this come about? any evidence collected on these changes (i.e. perceptions or evidenced)?
- *For pupils* - what outcomes -depth/ breadth? how did this come about - any evidence collected on these changes (i.e. perceptions or evidenced)?
- *Other?*
Evidence-based teaching: Draft EBT Panel Interview Schedule: Middle Leader

1. Introduction
Thank you for agreeing to be part of our evaluation panel. This interview is part of an evaluation, commissioned by the Department for Education (DfE), that aims to make an assessment of progress towards a system within which the teaching profession can improve practice through the rigorous use of robust evidence. The research is being undertaken by independent researchers at the Centre for Education and Inclusion Research at Sheffield Hallam University, with colleagues at Durham University and the Institute of Education, London.

From all the schools volunteering to take part in the panel we have selected a range of schools with varying levels of current engagement in EBT and differing characteristics such as school phase and location. The data from the interview will be analysed together with data from other members of the teacher panel and presented in a report that will be available on the DfE website. We may also use the data in professional and academic publications. You will not be named in any publication.

Check consent - referring to information sheet/consent form - if consent not already provided by email.

Check permission to record.

2. About you

2.1 Briefly describe your role in school

2.2 Please tell me what qualifications you have obtained/ are currently undertaking since your first degree and approximate dates?

{Note: ITE route and particularly masters may be an influencing factor in terms of willingness to engage/ seeing the relevance of engaging with evidence - and time since qualification may also be relevant}

3. 'Evidence' and 'evidence-based teaching' (Understanding, attitudes, beliefs and perceived capability)

{Establish the definition of evidence/ EBT being assumed in the following questions and beliefs about and attitudes towards EBT. This section also contains questions that relate to the engagement section of the matrix of engagement}

3.1 (E) Can you think about an aspect of your own practice that you have changed in some way in the past year:

- What led you to making that change?
- In what ways (if any) did you draw on evidence in making that change?
  Probe: the role of evidence in informing that decision?/ what they are counting as evidence/ at what points evidence is seen to be useful/important e.g. to understand the problem, identify an innovation etc - for what purposes
3.2 What do you understand 'evidence-based teaching' to be?

Probes: what counts as evidence and what doesn't? - internally generated / external evidence / how is EBT practised? / can/ in what ways can research impact on practice?

'In the questions that follow we are using the term 'evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews -such as those produced by the Sutton Trust, EEF and John Hattie; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry.'

3.3 (E) How important do you think it is to use evidence to inform teaching?

Probe: why do you think it is important or why not? / what is it important for? / what is it not important for? / how important compared to other ways of developing your practice?

3.4 (E) If I had asked you how important evidence was two years ago would your answer have been the same?

• [If changes] - what has led to you changing your opinions on this?

3.5 (E) Using this definition of evidence, is there any external research you have come across that has had a significant impact on you? i.e. changed the way you think and/or act? if so, can you explain how and why it came to have a significant impact

Probe: why do you think this research had an impact on you? - e.g. what was it about your context, the research and/or you or other factors that led to this impact?

3.7 (All) On a scale of 1 to 10 how well equipped do you personally feel you are to engage in evidence-based teaching? Where 1 is not at and 10 is you feel you have all the skills and knowledge necessary to undertake EBT?

Probe: reasons for rating - capacity and confidence re: awareness, engagement and use / what does well equipped mean to you?

4. Departmental /team (adapt as appropriate the role) approach to EBT

4.1 (E) On a scale of 1-10 how well embedded do you think EBT is in the work of your department/team? Where 1 is not at all and 10 is fully embedded?

Probe: reasons for rating given

4.2 (E) Can you tell me about the sorts of discussions you have in departmental / team meetings about teaching and learning (choose a new example if possible). Think about something that your department / team has been working on recently e.g. approaches to curriculum; assessment; outcomes for specific groups of pupils; observation etc
Probe/prompts:

What was talked about; who this was with; how much time was spent discussing this

How did the discussion develop; what else informed these discussions; what action was taken as a result?

What, if any, ideas, articles etc were drawn on to inform these discussions - informal/internal/practical suggestions or external findings from research, or both

4.3 (E) How would you describe the depth of these discussions? - e.g: quick solutions to a practical issue or more in-depth about how/why students learn/ a pedagogical principle

To what extent did your discussions focus on how and why you thought the [change would have a positive impact]

4.4 What expectations (if any) are placed on teachers in your department/team to engage in EBT? / what are they expected to be doing?

Prompts

- how many/what proportion of staff in what roles are expected to directly access evidence? - through what processes
- in what ways are staff expected to use evidence in planning and delivering teaching?
- how many/ what proportion of staff are expected to engage in undertaking research - how do they go about this?
- how do these expectations come about?-( e.g. school policy, championed by a senior leader, championed by interviewee)

4.5 (E) How important do you think it is that teachers in your department/team use evidence in their practice?

Probe: compared to other ways of improving teaching and learning in the department/team?

4.6 (E) What (if anything) are you expected to do to promote and support EBT in your team department?

Prompts

- advocate for EBT/ promoting/championing use?
- leading evidence based innovations
- bringing evidence to teachers attention?
- making research more easily accessible? - e.g. sourcing and synthesising research, sending out weblinks etc.
- helping teachers engage with research? e.g. discussions in team meetings etc.
- helping teachers use research to develop their practices?
- helping teachers to undertake their own research?

For any of the above they are involved in - probe what this involves and how they go about it/ and what appear to be more or less effective in implementing EBT
4.7 (U): How well equipped do you feel to promote and support EBT in your department/team?

Prompts:
- areas of confidence/ areas less confident,
- what it means to be well equipped

5. Awareness of evidence in the your department/team

5.1 What, if any, sources of external evidence are you aware of, that your department/team have drawn on in the last year to inform their practice?

Probe to find range: meta-analyses and reviews e.g. EEF toolkit; Hattie's Visible learning; Sutton trust; case studies produced by schools; journal articles; professional articles including TES; other

5.2 (A) Are you aware of other sources of evidence that the team could draw on?

(as above - to get an indication of the extent of their knowledge of evidence sources)

5.3 If appropriate As far as you know, how do members of your team/department find out about external evidence they could use to inform their practice?

- Source: own/team members searching - how? distribution from an evidence leader/team leaders/ from senior leaders/ in the library/ via school to school networks and partnerships/ academics visiting the school/school subscription to professional/academic journals/other; contacts with academics; HEI led networks?
- Processes by which it becomes available - e.g. where do you look? / do you do a summary for others? - link to the school development plan, the team identifies key issues and one member/ all members search for evidence where they look? - links to HEIs, who makes this happen?
- How much is available?/ range/ key foci

5.4 Are there any areas of practice where you have looked for evidence but were not able to find anything relevant or useful?

Probe: pedagogical focus/ where looked / what found - why not relevant and/or useful

5.5 (A) How do you and your team/department decide if you can rely on the evidence you find?

6. Use of Evidence in your department/team

6.1 (E) Thinking about our definition of evidence [we are using the term ' evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews -such as those produced by the Sutton Trust, EEF and John Hattie; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry]
Can you give some specific examples of evidence you have read, heard about or used (draw from earlier question if relevant) - [if none move to 6.3]

[If yes] what was engaging about it (why this article /evidence - e.g. relevance to current issue/interest)? Was it easy to understand? Did it need translating/adapting?

Did you share it (with who, why); discuss it (with who, why)? any variation across the range of evidence used

6.2 (U) (Drawing on examples in previous question) Did you put this or another article/evidence to use in your practice? If yes: Tell me how you went about this:

Probes: what was the process / who was involved?

- direct (e.g. did you just go ahead and experiment/incorporate into teaching, raise/check with head of phase) etc or indirect (e.g. senior/other staff led)

how did it come about?/ variation in approaches - and if so rationale for varied approaches {unpicking their theories of change}; tools used

how easy was it to use? - did it need translating?

6.3 (U) Do teachers in your department/team engage in undertaking research/enquiry to develop your team/schools practice? If so tell me what you do and how you go about this.

Prompts: who is involved? - whole team - some? / school / network? what is the process? (and where is evidence used in those processes/ how is it perceived that this will improve outcomes)? what tools/approaches e.g., EEF DIY evaluation toolkit; enquiry model - other?

6.4 (U) How confident as a department/team are you that you can choose the most innovations/ interventions to test out to improve pupil outcomes?

Probe: Why do you feel like this?

Check relationship of confidence to confidence in using evidence (e.g c/f practice knowledge);

7. Enablers and barriers to EBT in the school

7.1 (A) What support is available to you in using external evidence and/or undertaking research enquiry, as we define it, for you/your teams' teaching?

Prompts

- who supports you/ - how is support provided? what does it involve?
- other enabling actions ? e.g. are you given time to engage with and/or undertake research ?
- any professional development - how does this come about - through school?; networks?; by academic partners?
Probe - what forms of support has been effective in enabling you to lead EBT - what is it about those forms of support that has made them effective?

7.2 On a scale of 1 to 10 - tell me whether you think your school culture (i.e. 'the way we do things round here') is evidence friendly - 1 is not at all and 10 is we talk about and use evidence all the time

Prompts:
- tell me more about your reasons for giving this score
- do senior leaders talk about evidence? / what sorts of things do they say or do? -(including probing if evidence is handed down as a given this is what you are going to do now or teachers have agency in assessing evidence and adapting to own context)
- who champions using evidence in the school? - what do they do?

7.3 Are there any other factors that help you embed EBT in your team/department that we haven't talked about?

(e.g. enthusiasm of staff; links with HEIs; links with other schools; other)

7.4 What factors hinder your use / generation of evidence for your department/team's practice?

Probes: school-culture; staff attitudes; availability of research, accessibility of research; other priorities - such as?; other;

7.5 What would enable you to further embed evidence in relation to the practice of your dept/team?

(e.g. DfE actions (see logic model); school actions; MAT and/or TSA actions; Ofsted actions)

8. Cross-school activity

8.1 Does your team/department work with other schools to share educational research [using our definition]?

Prompts: how does this come about - what are the processes? / who is influential in making this happen? what triggers this happening? / scale of this - how many schools/ how frequently? / key foci/ are you working collaboratively to understand research - and if so how what are the processes - what do you talk about - give an example?

8.2 Does your team/department you work with other schools to undertake research/ collaborative enquiry?

Prompts: how does this come about - what are the processes? / who is influential in making this happen? what triggers this happening? / scale of this - how many schools/ how frequently? / key foci/ is the activity funded by external agencies e.g NCTL? - if not how is it resourced?
9. Impact

9.1 (U) Do you/your dept/team **evaluate the effectiveness and impact** of any evidence you've used to change practice?

- **Prompts:** how is this done?/what have been the main findings so far?

9.2 (building on previous question) Are you able to point to any **specific outcomes** your department/team's engagement in EBT?

**Prompts:**

- **For dept/team staff** - e.g. more confident, deeper understanding; able to justify your practice to others? how did this come about? any evidence collected on these changes {i.e. perceptions or evidenced}?
- **For pupils** - what outcomes -depth/ breadth? how did this come about - any evidence collected on these changes {i.e. perceptions or evidenced}?
- **Other**
Evidence-based teaching: Draft Teacher Panel Interview Schedule

1. Introduction
Thank you for agreeing to be part of our evaluation panel. This interview is part of an evaluation, commissioned by the Department for Education (DfE), that aims to make an assessment of progress towards a system within which the teaching profession can improve practice through the rigorous use of robust evidence. The research is being undertaken by independent researchers at the Centre for Education and Inclusion Research at Sheffield Hallam University, with colleagues at Durham University and the Institute of Education, London.

From all the schools volunteering to take part in the panel we have selected a range of schools with varying levels of current engagement in EBT and differing characteristics such as school phase and location. The data from the interview will be analysed together with data from other members of the teacher panel and presented in a report that will be available on the DfE website. We may also use the data in professional and academic publications. You will not be named in any publication.

Check consent - referring to information sheet/consent form -if consent not already provided by email.

Check permission to record.

2. About you

2.1 Briefly describe your role in school

2.2 Please tell me what qualifications you have obtained/ are currently undertaking since your first degree and approximate dates?

(Note: ITE route and particularly masters may be an influencing factor in terms of willingness to engage/ seeing the relevance of engaging with evidence - and time since qualification may also be relevant)

3. 'Evidence' and 'evidence-based teaching' (Understanding, attitudes, beliefs and perceived capability)

(Establish the definition of evidence/ EBT being assumed in the following questions and beliefs about and attitudes towards EBT. This section also contains questions that relate to the engagement section of the matrix of engagement)

3.1 (E) Can you think about an aspect of your own practice that you have changed significantly in some way in the past year:

- What led you to making that change?
- In what ways (if any) did you draw on evidence in making that change?  
  Probe: the role of evidence in informing that decision?/ what they are counting as evidence/ at what points evidence is seen to be useful/important e.g. to understand the problem, identify an innovation etc - for what purposes
3.2 What do you understand 'evidence-based teaching' to be?

Probes: what counts as evidence and what doesn't? - internally generated / external evidence /how is EBT practised? / can/ in what ways can research impact on practice?

'In the questions that follow we are using the term 'evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews -such as those produced by the Sutton Trust, EEF and John Hattie; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry.'

3.3 (E) How important do you think it is to use evidence to inform teaching?

Probe: why do you think it is important or why not? / what is important for? / what is it not important for?/ how important compared to other ways of developing your practice?

3.4 (E) If I had asked you how important evidence was two years ago would your answer have been the same?

• [If changes] - what has led to you changing your opinions on this?

3.5 (E) Using this definition of evidence, is there any external research you have come across that has had a significant impact on you? i.e. changed the way you think and/or act? if so, can you explain how and why it came to have a significant impact

Probe: why do you think this research had an impact on you? - e.g. what was it about your context, the research and/or you or other factors that led to this impact?

3.6 (E) How closely do your views on the importance of using evidence match those of other teachers in your school?

3.7 (All) On a scale of 1 to 10 how well equipped do you feel you are to engage in evidence-based teaching? Where 1 is not at and 10 is you feel you have all the skills and knowledge necessary to undertake EBT?

Probe: reasons for rating - capacity and confidence re: awareness, engagement and use / what do they think it means to be well equipped to engage in EBT?

4. Awareness of evidence

4.1 (A) What sources of external evidence that you could use to inform your teaching, are you aware of?

Probe to find range: meta-analyses and reviews e.g. EEF toolkit; Hattie's Visible learning; Sutton trust; case studies produced by schools; journal articles; professional articles including TES; other
4.2 (A) What, if any, sources of external evidence have you drawn on in the last year to inform your practice?

4.3 If appropriate: How do you find out about evidence that you could use to inform your practice?

Prompts/probes

- Source: own searching - how? distribution from an evidence leader/team leaders/ from senior leaders/ in the library/ via school to school networks and partnerships/ academics visiting the school/school subscription to professional/academic journals/other; contacts with academics; HEI led networks?
- Processes by which it becomes available - e.g. team leader looks for and/or does a summary of things they think important - link to the school development plan, the team identifies key issues and one member/ all members search for evidence - who makes this happen?
- How much is available?/ range/ key foci

4.4 Are there any areas of practice where you have looked for evidence but were not able to find anything relevant or useful?

Probe: pedagogical focus/ where looked / what found - why not relevant and/or useful

4.5 (A) If appropriate How do you decide if you can rely on the evidence you find?

5. Engagement

5.1 (E) Tell me about the discussions in school/departmental meetings about teaching and learning (choose a new example if possible). Think about something that your school or department has been working on recently e.g. approaches to curriculum; assessment; outcomes for specific groups of pupils; observation etc

Probe/prompts:

What was talked about; who this was with; how much time was spent discussing this

How did the discussion develop; what else informed these discussions; what action was taken as a result?:

What, if any, ideas, articles etc were drawn on to inform these discussions - informal/internal/practical suggestions or external findings from research, or both

5.2 How would you describe the depth of these discussions? - e.g: quick solutions to a practical issue or more in-depth about how/why students learn/ a pedagogical principle

To what extent did your discussions focus on how and why you thought the [change would have a positive impact]

5.3 (E) Thinking now about an example of a more informal, recent conversation with colleagues about Teaching and Learning - can you describe what you talked about; who with?
Probe: what was the focus and depth of this discussion - e.g: pragmatic/practical issues/ideas; or more evidence/ theoretical/conceptually focused?

To what extent did you or others draw on external evidence?

5.4 (E) Do you or any of your colleagues champion or lead the use of research or an area of research in your school?

If so what do you/ they do - and how is this received -what does it lead to?

6. Use of Evidence

6.1 (E) Thinking about our definition of evidence [we are using the term ' evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews -such as those produced by the Sutton Trust, EEF and John Hattie; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry]

Can you give some specific examples of evidence you have read, heard about or used (draw from earlier question if relevant) - [if none move to 6.3]

[If yes] what was engaging about it (why this article /evidence - e.g. relevance to current issue/interest)? Was it easy to understand? Did it need translating/adapting?

Did you share it (with who, why); discuss it (with who, why)? any variation across the range of evidence used

6.2 (U) (Drawing on examples in previous question) Did you put this or another article/evidence to use in your practice? If yes: Tell me how you went about this:

Probes: what was the process / who was involved?

- direct (e.g. did you just go ahead and experiment/incorporate into teaching, raise/check with head of phase) etc or indirect (e.g. senior/other staff led)

how did it come about?/ variation in approaches - and if so rationale for varied approaches {unpicking their theories of change}; tools used

how easy was it to use? - did it need translating?

6.3 (U) Do you engage in undertaking research/enquiry to develop your or your team/school's practice? If so tell me what you do and how you go about this.

Prompts: who is involved? - individual/ team/ school/ network? what is the process? (and where is evidence used in those processes/ how is it perceived that this will improve outcomes)? what tools/approaches e.g. EEF DIY evaluation toolkit; enquiry model; other

6.4 (U) How confident do you feel in choosing the most appropriate innovations/ interventions to improve pupil outcomes?
Probes: Why do you feel like this?

- follow up if not mentioned - Check relationship of confidence to confidence in using evidence (eg c/f practice knowledge);

7. Enablers and barriers to EBT in your school

7.1 What support is available to you to help you in using external evidence and/or undertaking research enquiry, as we define it, for your teaching?

Prompts

- who supports you -e.g. partner teacher, evidence leader/ team leaders; senior leaders; network - in what ways? (e.g mentoring/coaching, information providers etc.; bring teachers together to discuss evidence)
- other enabling actions ? eg, are you given time to engage with and-or undertake research ?
- any professional development - for accessing and using evidence and/or doing your own research? - how does this come about - through school?; networks?; by academic partners?

Probe - what forms of support has been effective in this way - what is it about those forms of support that has made them effective?

7.2 On a scale of 1 to 10 - tell me whether you think your school culture (i.e ‘the way we do things round here’) is evidence friendly [again, using our definition] - 1 is not at all and 10 is we talk about and use evidence all the time

Prompts:

- tell me more about your reasons for giving this score
- do senior leaders talk about evidence? / what sorts of things do they say or do? - (including probing if evidence is handed down as a given this is what you are going to do now or teachers have agency in assessing evidence and adapting to own context)
- who champions using evidence in the school? - what do they do?

7.3 Are there any other factors that help you embed the use/generation of evidence in your practice that we haven’t talked about?

(e.g. enthusiasm of other staff; links with HEIs; links with other schools; other;)

7.4 What factors hinder your use/generation of evidence in your practice?

Probes: school-culture; staff attitudes; availability of research, accessibility of research; other priorities- such as?; other;

7.5 What would enable you to further embed evidence in relation to your practice?

Prompts: department/ team actions; school actions
8. Cross-school activity

8.1 Do you work with other schools to **share evidence** [using our definition]?
Prompts: how does this come about - what does it involve / what are the processes? / who is influential in making this happen? what triggers this happening? / scale of this - how many schools/ how frequently? / key foci / are you working collaboratively to understand research - and if so what are the processes - what do you talk about - give an example?

8.2 Do you **work with other schools to undertake research/ collaborative enquiry**?
Prompts: how does this come about - what does it involve / what are the processes? / who is influential in making this happen? / is it funded by external agencies e.g. NCTL? / what triggers this happening? / scale of this - how many schools/ how frequently? / key foci

9. Impact

9.1 Are you able to point to any **specific outcomes from using/generating evidence**?

Prompts:

- For yourself - e.g. more confident, deeper understanding; able to justify your practice to others? how did this come about? any evidence collected on these changes (i.e. perceptions or evidenced)?
- For pupils - what outcomes -depth/ breadth? how did this come about - any evidence collected on these changes (i.e. perceptions or evidenced)?
- Other? e.g. for colleagues
3.2 Year 2 Research Tools

EBT Head teacher Interview - Year 2

Introduction

Thank you for continuing to take part in our EBT panel. This is a follow up to the telephone interview we conducted last academic year. Just to remind you, this is part of an evaluation commissioned by the Department for Education (DfE) - it aims to make an assessment of progress towards a teaching profession that can improve its practice through the rigorous use of robust evidence. The research is being undertaken by independent researchers at the Centre for Education and Inclusion Research at Sheffield Hallam University, with colleagues at Durham University and the Institute of Education, London.

Your school is one of a range selected because of their varying levels of engagement in EBT and differing characteristics such as school phase and location. The data you provided in the summer was analysed together with data from other members of the panel and presented in an internal interim report to the DfE. Together with the data from Year 1, we will conduct an overall analysis and present this in a final report that will be available on the DfE website. We may also use the data in professional and academic publications. Neither you, nor your school will be named in any reports or publications.

Check permission to record.

Re-check consent - referring to information sheet/consent form - record verbal consent if not already provided by email.

Note: notes in curly brackets { } can be used if asked to clarify - or guide probing but do not need to all be addressed

1. School context

1.1 Any notable changes to school context since last interview?

{e.g. new whole-school approaches/initiatives, improvement priorities, governance, accountability/Ofsted inspections, significant changes to staffing, student profile, performance/results etc.}

2. Role

2.1 Confirm year 1 role (within school and any significant responsibilities beyond the school) and check any changes this year

3. Influences on changes in practice
3.1 What is the most significant change you've made to your school's T&L/ practice this academic year/since we last spoke? (e.g. a new initiative/approach or implementation of resources)

What prompted this change?
{e.g. performance management priority, whole-school/chain/LA priority, departmental/subject, CPD, promotional product/material, other official advice/guidance, external research, self-generated}

How did you implement this change?
{e.g. Who is/was involved? / Your role? /Scale of the change? /To what extent was any 'innovation' implemented as prescribed or adapted? If so, how and why?}

Did information or evidence inform this change? If so what sorts of evidence?
{e.g. Where/who did this come from? (e.g. own experience, colleagues, other schools, school data, school-based inquiry, CPD, press/social media, research - meta-analyses/reviews etc)}

How did you use this evidence?
What was its purpose? {e.g. in understanding, communicating, persuading, identifying the innovation etc} / Which types of evidence have been most/less important in influencing this change?

4. School approaches to evidence-based teaching

4.1 What do you understand evidence-based teaching to be?

What counts as evidence and what doesn’t? / for what purposes is evidence used?

4.2 Do you think your understanding of evidence-based teaching has changed since we last spoke (in ...)? If so, how has it changed and what triggered that change in your understanding?

***In the questions that follow we are using the term 'evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence
reviews; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry."

4.3 How important do you think it is to use research evidence to inform teaching?

*Why is important or why not? / what is it important for? / what is it not important for? / how important compared to other forms of evidence {e.g. school data, evidence of practice from other schools, professional knowledge}?*

4.4 In our last interview, you gave the school a score of x/10 for in terms of having the skills and knowledge necessary to undertake research-EBT – where 1 is not all and 10 is very well equipped. How would you rate your school now out of 10?

*Reasons for rating now and any change from previous year*

{Note: if no rating for last year get one for both years}

4.5 If you know that an approach or intervention has a research evidence base does this increase its credibility or increase the likelihood that you will introduce it in your school?

*Has this changed over time?*

4.6 If you know that an approach or intervention has a research evidence base, does this increase its credibility to staff in your school and/or increase the likelihood that you will introduce it in your school?

*Has this changed over time?*

4.7 (see Year 1 record) Last time you talked about …….. being the expectations placed on teachers in the school to engage in EBT. / Can you update me on what is continuing and what (if anything) has changed?

*Probes only if needed*
• how many / what proportion of staff in what roles are expected to directly access evidence?
• in what ways are staff expected to use evidence in planning and delivering teaching?
• how many/ what proportion of staff are expected to engage in undertaking research?

5. Awareness, engagement and use

Note: In this section only ask detailed questions if the school is using/ engaging with/ or aware of research EBT according to our definitions of research evidence and use, engagement and awareness.

5.1 We are interested in understanding more about how schools develop awareness of research, engage with research and use research.

I’d like consider each of these aspects in turn:

5.1.1 First, focusing on the use of research evidence We define use as: any activity where research evidence is actively used to investigate and change practice

Can you give me an example of staff using research evidence to develop teaching and learning practice in since we last spoke? Note: if possible pick up on school rather than cross-school use here

Who was involved? – (individual/ team/ school/ network?) what did you/ your staff do? what approaches and tools were used?/ how was the evidence used? did the staff undertake their own research/enquiry - if so what did this involve?

How easy was the research evidence to use? - did it need 'translating' - and if so how did this happen?

Are there any other ways in which your school has used research evidence?

Has the use of research evidence in your school changed since we last spoke? (scale: much higher / higher / about the same/ less / much less and open comments)

5.1.2 Secondly, we define engagement as: thinking that it is important to draw on research evidence to inform and improve practice, and having conversations about the evidence.
What happens in your school between knowing about a piece of research out there and doing something with it, or deciding not to use it, in your school?

{e.g. Who is involved?/ are there facilitators and/or gatekeepers / is there a process e.g via PM, staff meetings?}

Do you hear staff talking about evidence either in formal or informal settings? If yes - what sort of things do they talk about? can you give an example? (Note: trying to get a sense of practical solutions or in-depth how/why students learn/ pedagogical principles)

Where and when do they talk about evidence? Clarify most staff, some staff or a few staff?

What sources of the evidence do staff refer to when they talk about research evidence?
- {e.g meta-reviews, research journals, professional articles, research digests, books, other} / are reviews/digests forwarded or compiled by the school? {If so} How do staff use these? /How effective/useful do you think they are for staff? And why?

Thinking about engagement with research evidence as a whole - that is: thinking that it is important to draw on research evidence to inform and improve practice, and having conversations about the evidence. Has this changed since we last spoke... if so, in what ways? (scale: much higher/ higher / about the same/ less/ much less - plus open comments)

5.1.3 Thirdly, we define awareness as: understanding what research evidence is, knowing how to access research, being able to judge how robust research evidence is, knowing that it can help improve practice, how it does that, and how to go about being ‘evidence informed’

How aware are your staff of these things?
Which staff/ depth of awareness

Has staff awareness of research evidence changed since we last spoke... if so, in what ways? (scale: much higher/ higher / about the same/ less/ much less - plus open comments)

5.2 Has your school been involved in any external projects as a research participant? If so what has been the impact for staff and the school?
What involved in/ which staff

6. Enablers and barriers to Research - EBT in your school
6.1 In this question we are going to focus on what is in place in terms of the **structures, systems, processes, policies** and **guidance** in your school to support research evidence-based teaching. Last time (year 1 record) you discussed... being in place/planned. Can you update me on what is continuing and any changes since we last spoke?

{Probes (only if needed)}

- Whole school structures/processes and policies
- Guidance for teachers e.g. on judging the robustness of research/ accessing evidence/ undertaking research/enquiry
- Performance management, appraisal structures?
- Activities of champions/research lead roles, mentors, research groups, dedicated time etc
- CPD within school and external that relates to EBT / support for masters degrees? / other relevant professional learning?}

6.2 (See year 1 record) What (if anything) do you expect **middle leaders** to do to support teachers to engage in EBT?

{e.g. promoting EBT? / leading evidence-based innovations etc.?/ all middle leaders or some middle leaders roles? - rationale for this?}

6.3 (See Y1 record) Are any other kinds of **support** available to teachers for using research evidence? If so , what are these?

*Is this a change from last year? - if so what has changed and why?*

6.4 Across the different forms of support that is provided in your school to support EBT - which approaches have you found have the **greatest impact** on changing teacher practices?

*Can you explain why you think these approaches were particularly effective?*

*Which forms of support are least crucial in your school? and why?*

6.5 Last year, you scored your **school culture** (i.e ‘the way we do things round here’) x/10 for being research evidence-friendly, where 1 is not at all research-evidence friendly, and 10 is we talk about and use evidence all the time. How would you score your school now?

*Why the same / different?*

*Do you / senior leaders talk about research evidence any differently? / In what ways?*

*What other factors influence the school culture in relation to supporting EBT- (e.g. enthusiasm of staff, links with HEIs, staff doing higher degrees etc, links with other schools etc) Has this changed since last year - if so how?*
6.6 Compared to last year, how confident do you feel in supporting EBT in your school?
   What (if anything) has changed?
   What supports you in implementing EBT? (e.g. networks, meetings, conferences etc)

6.7 (See Year 1 record) What factors hinder the use of research evidence in your schools' practices or teachers being able to undertake their own research/enquiry?
   {e.g. School-culture; staff attitudes; availability of research, accessibility of research; other priorities - such as?}
   Has this changed since last year? If so, how and why?

6.8 What would enable you to further embed research evidence into the school's practices and/or help staff undertake more research/enquiry?
   {e.g. DfE actions, school actions, MAT/TAS, Ofsted etc}

7. Cross-school activity

7.1 Since last year, has the school worked with other schools to share and exchange research evidence and/or to undertake research / collaborative enquiry? [using our definition**]
   How did this come about - what /who was involved? who is influential in making this happen? scale - how many schools/ how frequently? / is it funded by external agencies {e.g. NCTL/ EEF}?/ key foci / what are the processes?
   Has the degree of involvement changed since we last spoke? If so, in what ways and why?

8. Evaluating the impact of changes to practice

8.1 Last time you mentioned (see Y1 record)....in terms of evaluating the impact of changes to practice? Has this changed since we last spoke and if so in what ways?
   {e.g. anecdotally/experientially or robust collection and analysis of data; Who is involved in this? How much emphasis is there on collecting data/evidence of impact? How are the findings used and shared?}

9. Outcomes for teachers
9.1 Thinking about all the ways that research evidence is used in your school and any research undertaken by teachers, what do you think the benefits have been for staff and the school overall?

{e.g. more confident staff, deeper understanding; improved practice/performance; critical thinking/questioning/challenging findings/methods}

10. Advice for other schools

10.1 For highly-engaged schools only: What advice would you give other schools looking to embed research-EBT into their practice?

{e.g. What have you learnt about effective ways of doing this / overcoming barriers for staff?}

10.2 All schools: Do you think there are any particular pre-requisites for schools to be able to engage in EBT?

For highly-engaged schools only probe if time: underlying attributes and processes that relate to their ability to structure, manage and deliver change

- {coherent change management processes
- clear and shared school improvement objectives
- an outward looking culture
- wise and precise use of data
- understanding of effective CPD process
- understanding of effective implementation
- integration of different research and enquiry activities into overall school decision-making}

11. Do you have any other comments on research related EBT?
EBT or research champion or if one not designated the CPD lead - Year 2

Introduction

Thank you for taking part in our EBT panel. We talked to the Head and other staff in your school last year and are talking to the Head and another teacher this year. This is part of an evaluation commissioned by the Department for Education (DfE) - it aims to make an assessment of progress towards a teaching profession that can improve its practice through the rigorous use of robust evidence. The research is being undertaken by independent researchers at the Centre for Education and Inclusion Research at Sheffield Hallam University, with colleagues at Durham University and the Institute of Education, London.

Your school is one of a range selected because of their varying levels of engagement in EBT and differing characteristics such as school phase and location. The data you provided in the summer was analysed together with data from other members of the panel and presented in an internal interim report to the DfE. Together with the data from Year 1, we will conduct an overall analysis and present this in a final report that will be available on the DfE website. We may also use the data in professional and academic publications. Neither you, nor your school will be named in any reports or publications.

Check permission to record.

Re-check consent - referring to information sheet/consent form - record verbal consent if not already provided by email.

Note: notes in curly brackets {} can be used if asked to clarify - or guide probing but do not need to all be addressed

12. Role and qualifications

1.1 What is your role and main responsibilities in your school?

1.2 What, if any, qualifications have you taken since qualifying as a teacher that have included a focus on EBT or undertaking research?

(e.g. NPQH, ML qualifications, masters, doctorate)

13. Influences on changes in practice

Note: This is an open section - encourage the interviewee to talk about a recent change to practice and what influences this – we are interested in any forms of evidence used (not just research evidence)–and the ways in which different forms of evidence are brought together in practice.

3.1 What is the most significant change you've made to your school's T&L/ practice this academic year/since we last spoke? (e.g. a new initiative/approach or implementation of resources)
What prompted this change?
{e.g. performance management priority, whole-school/chain/LA priority, departmental/subject, CPD, promotional product/material, other official advice/guidance, external research, self-generated}

How did you implement this change?
{e.g. Who is/was involved? / Your role? / Scale of the change? / To what extent was any 'innovation' implemented as prescribed or adapted? If so, how and why?}

Did information or evidence inform this change? If so what sorts of evidence?
{e.g. Where/who did this come from? (e.g. own experience, colleagues, other schools, school data, school-based inquiry, CPD, press/social media, research - meta-analyses/reviews etc.)}

How did you use this evidence?
What was its purpose? {e.g. in understanding, communicating, persuading, identifying the innovation etc.} / Which types of evidence have been most/less important in influencing this change?

14. Evidence-based teaching
4.1 What do you understand evidence-based teaching to be?

What counts as evidence and what doesn’t? / for what purposes is evidence used?

**In the questions that follow we are using the term 'evidence' to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry.'

4.3 How important do you think it is to use research evidence to inform teaching?

Why is important or why not? / what is it important for? / what is it not important for? / how important compared to other forms of evidence (e.g. school data, evidence of practice from other schools, professional knowledge)? / have you views on importance changes over the last two years - if so how did this change come about?

4.4 How would you rate your school overall out of 10, in terms of having the skills and knowledge necessary to undertake research-EBT?

What are your reasons for this rating?
4.5 If you know that an approach or intervention has a research evidence base, does this increase its **credibility** to staff in your school and/or increase the likelihood that you would introduce it in your own practice or recommend it to others?

5. Awareness, engagement and use

Note: In this section only ask detailed questions if the school is using/engaging with/or aware of research EBT according to our definitions of research evidence and use, engagement and awareness.

5.1 We are interested in understanding more about how schools develop **awareness** of research, **engage** with research and **use** research.

I'd like to consider each of these aspects in turn:

5.1.1 First, focusing on the **use** of research evidence in your school. We define **use** as: any activity where research evidence is actively used to investigate and change practice. Can you give me an example of staff using research evidence to develop teaching and learning practice since we last spoke? Note: if possible pick up on school rather than cross-school use here and something the interviewee has supported.

*Who was involved? – {individual/team/school/network?} What did you/other staff do? What approaches and tools were used?/ How was the evidence used? Did the staff undertake their own research/enquiry - if so what did this involve?*

*How easy was the research evidence to use? - did it need 'translating' - and if so how did this happen?*

*Are there any other ways in which you/your school have used research evidence?*

5.1.2 Secondly, we define **engagement** as: thinking that it is important to draw on research evidence to inform and improve practice, and having conversations about the evidence.

What happens in your school between knowing about a piece of research out there and doing something with it, or deciding not to use it, in your school?

*{e.g. What is your role in this? Who else involved and what do they do?/ is there a process e.g. via PM, staff meetings?}*
Do you hear staff talking about evidence either in formal or informal settings? {if yes} - what sort of things do they talk about? can you give an example? (Note. trying to get a sense of practical solutions or in-depth how/why students learn/ pedagogical principles)

Where and when do they talk about evidence? Clarify most staff, some staff or a few staff?

What sources of the evidence staff refer to when they talk about research evidence?
- {e.g. meta-reviews, research journals, professional articles, research digests, books, other}. / are reviews/digests forwarded or complied by the school? {If so} How do staff use these? /How effective/useful do you think they are for staff? And why?

5.1.3 Thirdly, we define awareness as: understanding what research evidence is, knowing how to access research, being able to judge how robust research evidence is, knowing that it can help improve practice, how it does that, and how to go about being ‘evidence informed’

How aware are staff in your school of these things?
Which staff/ depth of awareness

5.2 Has your school been involved in any external projects as a research participant? If so what has been the impact for you, other staff and the school?
What involved in/ which staff

6. Enablers and barriers to Research - EBT in your school
6.1 What is your role in relation to promoting and supporting research EBT? (*as per our definition)?
What do you do/ who do you work with? / scale of work - in school and beyond the school / what are the intended outcomes of the activity

6.2 Can you tell me about other structures, systems, processes, policies or guidance in your school to support research evidence-based teaching.

{Probes (only if needed)}

- Whole school structures/processes and policies

- Guidance for teachers e.g. on judging the robustness of research/ accessing evidence/ undertaking research/enquiry

- Performance management, appraisal structures?
• Activities of other champions/research lead roles, mentors, research groups, dedicated time etc.

• CPD within school and external that relates to EBT / support for masters degrees? / other relevant professional learning?

6.3 Across the different forms of support that is provided in your school to support EBT - which approaches have you found have the **greatest impact** on changing teacher practices?

- Can you explain why you think these approaches were particularly effective?
- Which forms of support are least crucial in your school? and why?

6.4 How would you score your **school culture** (i.e 'the way we do things round here') x/10 for being research evidence-friendly, where 1 is not at all research-evidence friendly, and 10 is we talk about and use evidence all the time?

- **Reasons for score?**
  - What factors do you think influence the school culture in relation to supporting EBT- {e.g. enthusiasm of staff, links with HEIs, staff doing higher degrees etc., links with other schools etc.}

6.5 Compared to last year, how **confident** do you feel in supporting EBT in your school?

- **What (if anything) has changed?**
- **What supports you in implementing EBT? (e.g. networks, meetings, conferences etc)**

6.6 What factors **hinder** the use of research evidence in your schools’ practices or teachers being able to undertake their own research/enquiry?

  {e.g. School-culture; staff attitudes; availability of research, accessibility of research; other priorities - such as?}

7. Cross-school activity

7.1 Since last year, has the school worked with other schools to **share and exchange research evidence** and /or to **undertake research / collaborative enquiry**? [using our definition**]**?

- **How did this come about - what was your role in this /who else was involved? who is influential in making this happen? scale - how many schools/ how frequently? / is it funded by external agencies {e.g. NCTL/ EEF}?/ key foci / what are the processes?**
8. Evaluating the impact of changes to practice

8.1 How do you go about evaluating the impact of changes to practice in your school? 
   {e.g. anecdotally/experientially or robust collection and analysis of data; Who is involved in this?} 
   Do you have a particular role in supporting this? {How much emphasis is there on collecting 
   data/evidence of impact? How are the findings used and shared?}

9. Outcomes for teachers

9.1 Thinking about all the ways that research evidence is used in your school and any research 
   undertaken by teachers, what do you think the benefits have been for staff and the school overall? 
   {e.g. more confident staff, deeper understanding; improved practice/performance; critical 
   thinking/questioning/challenging findings/methods}

10. Advice for other schools

10.1 For highly-engaged schools only: What advice would you give other schools looking to embed 
   research-EBT into their practice? 
   {e.g. What have you learnt about effective ways of doing this / overcoming barriers for staff?}

10.2 All schools: Do you think there are any particular pre-requisites for schools to be able to engage 
   in EBT? 
   {For highly-engaged schools only probe if time: underlying attributes and processes that relate 
   to their ability to structure, manage and deliver change} 
   • coherent change management processes 
   • clear and shared school improvement objectives 
   • an outward looking culture 
   • wise and precise use of data 
   • understanding of effective CPD process 
   • understanding of effective implementation 
   • integration of different research and enquiry activities into overall school decision-making

11. Do you have any other comments on research related EBT?
EBT Teacher interview - Year 2

Introduction

Thank you for continuing to take part in our EBT panel. This is a follow up to the telephone interview we conducted last summer. Just to remind you, this is part of an evaluation commissioned by the Department for Education (DfE) - it aims to make an assessment of progress towards a teaching profession that can improve its practice through the rigorous use of robust evidence. The research is being undertaken by independent researchers at the Centre for Education and Inclusion Research at Sheffield Hallam University, with colleagues at Durham University and the Institute of Education, London.

Your school is one of a range selected because of their varying levels of engagement in EBT and differing characteristics such as school phase and location. The data you provided in the summer was analysed together with data from other members of the teacher panel and presented in an internal interim report to the DfE. Together with the data from Year 1, we will conduct an overall analysis and present this in a final report that will be available on the DfE website. We may also use the data in professional and academic publications. Neither you, nor your school will be named in any reports or publications.

Check permission to record.

Re-check consent - referring to information sheet/consent form - record verbal consent if not already provided by email.

Note: notes in curly brackets {} can be used if asked to clarify - or guide probing but do not need to all be addressed

1. School context

1.1 Any notable changes to school context or priorities since last interview?

{Note: this is only to pick up any changes significant to the teacher}

2. Role

2.1 Confirm year 1 role and check any changes this year

3. Influences on changes in practice

Note: This is an open section - encourage the interviewee to talk about a recent change to practice and what influences this – we are interested in any forms of evidence used (not just research evidence)– and the ways in which different forms of evidence are brought together in practice.

3.1 What is the most significant change you've made to your practice this academic year/since we last spoke? (e.g. a new approach, initiative or resource)
What prompted this change?
{e.g. performance management priority, whole-school/chain/LA priority, departmental/subject, CPD, promotional product/material, other official advice/guidance, external research, self-generated}

How did you implement this change?
{e.g. Who is/was involved? / Your role? / Scale of the change? / To what extent was any ‘innovation’ implemented as prescribed or adapted? If so, how and why?}

Did information or evidence inform this change? If so what sorts of evidence?
{e.g. Where/who did this come from? (e.g. own experience, colleagues, other schools, school data, school-based inquiry, CPD, press/social media, research - meta-analyses/reviews etc.)

How did you use this evidence?
What was its purpose? {e.g. in understanding, communicating, persuading, identifying the innovation etc.} / Which types of evidence have been most/less important in influencing this change?

4. Evidence-based teaching

4.1 What do you understand evidence-based teaching to be?
What counts as evidence and what doesn’t? / for what purposes is evidence used?

4.2 Do you think your understanding of evidence-based teaching has changed since we last spoke (in …)? {refer to year 1 data if appropriate} If so, how has it changed and what triggered that change in your understanding?

**‘In the questions that follow we are using the term ‘evidence’ to mean seeking out and using: quantitative and qualitative research findings generated by external researchers; evidence reviews; external evaluations; and/or research produced by teachers/schools that is underpinned by systematic enquiry.’

4.3 How important do you think it is to use research evidence to inform teaching?
Why is important or why not? / what is it important for? / what is it not important for? / how important compared to other forms of evidence {e.g. school data, evidence of practice from other schools, professional knowledge}? / have you views on importance changes since we last spoke – (if so) how did this change come about?
4.4 In our last interview, you gave yourself a score of x/10 for in terms of being equipped to engage in research-EBT – where 1 is not all and 10 is very well equipped. How would you rate yourself now out of 10?

*Reasons for rating now and any change from previous year [e.g. skills, knowledge, confidence]*

{Note: if no rating for last year get one for both years}

4.6 If you know, or are told, that an approach or intervention has a research evidence base does increase its *credibility and/or the likelihood that you will adopt* the approach?

*Has this changed over time?*

5. **Awareness, engagement and use**

5.1 We are interested in understanding more about how schools develop *awareness* of research, *engage* with research and *use* research.

I’d like to consider each of these aspects in turn:

5.1.1 First, focusing on the *use* of research evidence We define *use* as: any activity where research evidence is actively used to investigate and change practice

Can you give me an example where you have used research evidence to develop teaching and learning practice since we last spoke? {Note: if possible pick up on school rather than cross-school use here. If no use example, ascertain if this is less use than last year or the same- then go to 5.1.2}

*Who was involved? – [you/ your team/ school/ network]? what did you do? what approaches and tools were used?/ how was the evidence used? did you and/or other staff undertake your own research/enquiry - if so what did this involve?*

How easy was the research evidence to use? - did it need 'translating' - and if so how did this happen?

Are there any other ways in which you have used research evidence?

*Has the your use of research evidence changed since we last spoke? (scale: much higher / higher / about the same/ less / much less and open comments)*
5.1.2 Secondly, we define engagement as: thinking that it is important to draw on research evidence to inform and improve practice, and having conversations about the evidence.

Do you think your engagement with research EBT this changed since we last spoke... if so, in what ways? (scale: much higher/ higher / about the same/ less/ much less - plus open comments)

Have you ever found a piece of research evidence yourself that you thought would be useful to help your practice or your colleagues practices? {If so,} - what happened in your school between knowing about a piece of research out there and doing something with it, or deciding not to use it, in your school?

{e.g. Who is involved?/ are there facilitators and/or gatekeepers / is there a process e.g via PM, staff meetings?}

Do you hear talk with other staff about research evidence either informally or in meetings? {If yes,} - where and when do they talk about evidence - and what sort of things do you talk about? Can you give an example? {Note. trying to get a sense of practical solutions or in-depth how/why students learn/ pedagogical principles}

What sources of the evidence do you or your colleagues refer to when they talk about research evidence?
{ - e.g. meta-reviews, research journals, professional articles, research digests, books, other.} / Are reviews/digests forwarded or complied by the school?

5.1.3 Thirdly, we define awareness as: understanding what research evidence is, knowing how to access research, being able to judge how robust research evidence is, knowing that it can help improve practice, how it does that, and how to go about being ‘evidence informed’

How aware are you of these things?

Has your awareness of research evidence changed since we last spoke... if so, in what ways? (scale: much higher/ higher / about the same/ less/ much less - plus open comments)

5.2 Has you or your school been involved in any external projects as a research participant? If so what has been the impact for you and your colleagues?
6. Enablers and barriers to Research-EBT in your school

6.1 What support or CPD is available to you to help you in using research evidence and/or undertaking research/enquiry?

{e.g. CPD - mentoring/coaching, bringing teachers together to discuss evidence, Masters/further study, inset sessions. Other enabling actions: performance management, dedicated time, support from a research champion or other middle leaders or other colleagues}

Which forms of support (if available) have been most effective in helping you access or use research evidence or undertake your own research/enquiry? What is it about those forms of support that has made them effective?

Is the support available the same or different to last year? {If so,} in what ways {use previous data to inform questioning}

6.2 Last year, you scored your school culture (i.e 'the way we do things round here') x/10 for being research evidence-friendly, where 1 is not at all research-evidence friendly, 10 is we talk about and use evidence all the time.

How would you score your school now? Why the same/different?

Do senior leaders talk about research evidence any differently? / What sorts of things do they say or do?

Is research-evidence mostly reviewed by senior colleagues or research champions who decide what the school will make use of, or do teachers access evidence directly?

Do senior leaders provide detailed information about how they want research evidence to be used to shape practice or do teachers take the evidence and together (or individually?) work out how to change practice?

6.3 What factors hinder your use of research evidence in your practice or being able to undertake your own research/enquiry?

{e.g. School-culture; staff attitudes; accessibility of research; other priorities - such as?}

Has this changed since last year? If so, how?

6.4 What would enable you to further embed research evidence in relation to your practice and/or undertake your own research/enquiry?

{e.g. personal/ department/ team actions; school actions}
7. Cross-school activity

7.1 Since last year, have you worked with teachers in other schools to share and exchange research evidence and/or to undertake research/collaborative enquiry? [using our definition**]?

How did this come about - what happens/who is involved? scale - how many schools/how frequently do you meet?/is it funded by external agencies {e.g. NCTL/EEF}/key foci?

Has the degree of involvement changed since we last spoke? If so, in what ways and why?

8. Evaluating the impact of changes to practice

8.1 How do you and other teachers know whether a new practice/change makes any difference?

{e.g. anecdotally/experientially or robust collection and analysis of data; Who is involved in this? How much emphasis is there on collecting data/evidence of impact? How are the findings used and shared?}

Has this changed since we last spoke, {and if so} in what ways?

9. Outcomes for teachers

9.1 Thinking about all the ways that you have used research evidence and any research/enquiry you have undertaken, what have you gained? what difference has it made to you…?

{e.g. more confident staff, deeper understanding; improved practice/performance; critical thinking/questioning/challenging findings/methods}

10. Do you have any other comments on research related EBT in your school?