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The Opportunities and Challenges of Leaders Using Evidence in Education

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Connecting Research to Practice: Leaders' Perspectives

This chapter presents a practitioner-focused perspective on the use of evidence in schools. We use the review findings in Chapter 2 to provide a framework for examining and understanding leaders' experiences of using evidence in schools. While not a new phenomenon in education (Davies, 1999), evidence-informed practice (EIP) is widely and increasingly considered to be a powerful way of effecting school improvement and an important component of professional practice (Brown & Zhang, 2016). Advocates have made the case for EIP on numerous grounds including improving the quality of teaching and learning; professionalising and empowering teachers; collaboration and sharing of good practice; and reducing and managing workload (e.g. Allison, 2018; Brown and Greany, 2018; Coldwell et al., 2017). There is wide agreement that evidence cannot be the sole basis for practice and must sit alongside professional judgement and experience. Emphasis varies however between those advocating a more scientific, evidence-led approach (Goldacre, 2013); those who seek a balance between practical and research perspectives (see e.g. Brown et al., 2017; Cordingley, 2008); and those who hold that the role of evidence is necessarily minimal (Biesta et al., 2010). At present, there is also wide variation in what constitutes EIP. In Chapter 2, the Gorard et al. grid framework identifies numerous types and degrees of EIP, organised according to levels of evidence modification and interaction. What is clear is that EIP encompasses a huge range of different and interconnected practices and objectives. The aim of this chapter is to explore how these are pursued by leaders and outline their experiences in getting evidence into practice across their diverse settings and contexts.

Even for advocates and enthusiasts, there are recognised challenges and expertise required to influence meaningful change and embed EIP. Part of the challenge is the so-called 'gap' between research and practice (Levin, 2013). But what is it that creates this gap? Recent literature and commentary suggests that myriad factors are at play, including knowledge, accessibility, awareness, interest, resources and time (Coldwell et al., 2017; Sharples, 2018). So even where there is good evidence in an area, this does not necessarily translate easily in to education practice and improvement. And, as other work in this collection suggests, some evidence has a greater 'distance to travel' in order to be effectively implemented. As a result, organisations such as the Education Endowment Foundation (EEF) seek to communicate research in an accessible form and support practitioners with its implementation (EEF, 2019; IEE, 2019), and others (such as Evidence Based Education, CUREE and the Chartered College of Teachers (CCT)) offer development programmes and resources to train and support those who wish to adopt evidence-informed approaches. These efforts notwithstanding, there is widely thought to be a 'last mile problem' (Schneider, 2018) to get evidence into practice, even when provided in a highly accessible form. A central aim of this chapter is to shed light on this 'last mile' by examining the experiences and views of leaders working to put evidence into practice in their schools.

This chapter draws on 20 interviews with school leaders including those in middle, senior and executive leadership roles. We used a semi-structured interview schedule and the Gorard et al. grid (see Chapter 2) to support and frame the discussions around types and transfer of evidence. Our participants included leaders from different settings including private/state schools, primary/secondary phases, different subject specialisms and geographical regions. Participants were approached via the authors' existing networks. All interviews were completed in the Spring-Summer 2019. There is likely to be a sample bias towards those who are enthusiastic and proactive in relation to evidence use. We did also seek out more sceptical views on EIP (as will be outlined in the chapter below); however, examining the perspectives of schools and practitioners less engaged in EIP remains a priority for future work. Our intention here is therefore not to provide a representative picture but to understand features of the current landscape of EIP and the opportunities and challenges faced by leaders who have a level of interest and engagement.

Finally, why do we focus on school leaders? While classroom teachers are often the intended 'users' of research evidence, the role of leaders in initiating, implementing and sustaining school improvement is widely acknowledged (Brown, 2015). We do, however, take a broad conception of leadership and set out to explore levels of EIP leadership; we surface powerful examples of teacher leadership and middle leadership as well as that of senior and executive leaders, and we explore some of the challenges of securing buy-in at various levels. We hold that – while making evidence available to teachers can bring about improvement – if leaders and leading practitioners are not engaging with evidence to drive and support EIP, any potential benefits for school improvement are unlikely to be realised at any significant scale.

Sourcing, Filtering and Curating Evidence

The starting point for our interviews was to ask the leaders what evidence-informed practice looked like for them and what evidence they or their colleagues used. We deliberately gave a broad definition of 'evidence' and left this open in order to gain a sense of their different perspectives and interpretations (Coldwell et al., 2017; Gorard, 2019 – Chapter 2). Our participants described many sources of evidence and approaches to engaging with it.

Sources of Evidence

There was a general feeling amongst school leaders that currently there is a wealth of accessible research available and a recent positive shift towards EIP. The majority of our participants highlighted the variety of evidence forms and sources that they had used. Books written by current or ex-practitioners and education consultants (e.g. Tom Sherrington, Mary Myatt, Carl Hendricks, Alex Quigley) were popular and cited often. One deputy head told us that every leader in her multi-academy trust (MAT) was provided with a copy of Mary Myatt's (2018) *The Curriculum* book; others mentioned continuing professional development and learning (CPDL) libraries and explained that these fostered a shared understanding and agenda around evidence-informed approaches. Other common sources of evidence mentioned were texts written by academics for a practitioner audience – notably, the work of the Learning Scientists (Weinstein et al., 2018) and Rosenshine's *Principles of Effective Instruction* (Rosenshine, 2012). Similarly, government reports, practitioner-focused publications such as the CCT Impact Journal and evidence reports and reviews by the Education Endowment Foundation (EEF) were cited by many leaders, although less frequently than the sources above. There were fewer mentions of using raw evidence (such as reading

single-study journal articles); however, where participants were developing understanding in a specific area, they sometimes spoke about academic work that they had accessed to inform strategies or policies that they had developed. Overall, the responses suggested that leaders tended to value the integration of modified, academic and practitioner-focused accounts of evidence-informed approaches to provide both robustness and practicality. This was to some extent a reflection of the numerous challenges reported by leaders in locating trustworthy and relevant evidence. Leaders spoke positively about free-to-access databases, such as that provided by the CCT or by universities when they or colleagues were taking academic courses, and noted the barriers posed by paywalls when outside of these channels; they also however had practical concerns around the amount of time required to search, read and digest raw evidence. There was a sense that the amount of single-study research was overwhelming. Even within a defined research area (e.g. phonics) one is inundated with thousands of pieces or variable quality and conflicting perspectives. Without considerable time as part of an academic programme or built into a researcher-leader role, many felt they had to look to other people or sources for locating relevant research.

There were myriad channels for finding research evidence. Some leaders felt that their role required an element of 'horizon-scanning' and/or seeking research in response to a school need. The social media site, Twitter, was highly influential for the majority of our participants who wanted a sense of being 'tuned in' to the current debates surrounding evidence-informed education. Twitter, as well as a useful starting point for accessing research, also provided perspectives on the value of research evidence and strategies relating to it, where the source of and commentary around the research was often as important as the research itself for leader perceptions of value. Twitter was also a forum for learning about other education and research-related activities and events such as ResearchEd and the Festival of Education. Some leaders discussed the value of subject-specific research, usually English (or literacy) and mathematics. These participants tended to mention the role of subject associations and hubs as a channel for learning about and accessing research evidence and expertise. Like Twitter, these provide a network of fellow practitioners (and sometimes academics) and opportunities for dissemination to a wide cohort of interested parties.

The EEF was mentioned as a source and channel for research access by several of our participants, although their experiences and views on this were quite mixed. Some felt that the information provided by the EEF to schools was accessible and of high-quality. One Head of Department for example cited a recent review of effective strategies for improving literacy in secondary schools (EEF, 2019), saying that it provided a useful summary and achievable approaches which schools could adopt. An Assistant Head at another school felt that the EEF (and its *Teaching and Learning Toolkit*) did a good job of distilling key issues, providing a helpful starting point for understanding these, and reducing the need for leaders to spend time going directly to books and journal articles. A number used summaries as a gateway to the original research evidence on which reviews or curated pieces were based. Others, however, mentioned the EEF in a more fleeting way: they were aware of the organisation and their website and resources; some had even participated in EEF-funded research trials; and yet, for them, the EEF did not seem to be a particularly important or trusted source. Such leaders tended to describe their *own* role in terms of 'curation' and synthesis or a bridge between research and practice. Rather than relying on summaries, they felt personally responsible for sourcing and digesting relevant research and evidence; familiarity with the underlying research was important to making it accessible and relevant to colleagues. Further, one respondent felt they were better placed to do this than – as they put it – researchers 'doing meta-analyses' who were 'far away from the realities of working with young people, what people say and what practitioners talk about'.

The (predominantly research-engaged) leaders we spoke to saw themselves as both 'consumers' and 'curators' of usable evidence, describing a mix of activities ranging from leading research, participating in projects, studying, translating, and implementing evidence. Below we examine these various activities, loosely organised into more 'consumer' roles, where leaders looked to implement already usable evidence, and 'curator' roles in which they felt evidence needed filtering, summarising or translating for use.

Leaders Role as Consumers: Finding, accessing and judging the rigor of research

The approach to finding research commonly described was one of listening for a 'repeated message' and relying on trusted sources bringing things to their attention. One secondary assistant head for example talked about his school's engagement with a local Research School and close proximity to an education consultancy company. He felt that the high-quality information provided by these two trusted avenues, both online and in-person, gave clear direction in terms of research evidence worth engaging with. Trusted sources mentioned by others included established and well-known educationists including bloggers, researchers and school leaders, and organisations such as the National Literacy Trust or Evidence Based Education. Leaders also spoke about the views of others in terms of consensus as well as trust and authority in a single source. Some concerns about misplaced trust were expressed however: one senior leader, responsible for professional learning across a MAT, felt that popular books authored by well-known teachers and bloggers could have undue influence. She felt that a simplistic treatment of complex issues, and an adversarial and partisan culture set on 'sweeping away' existing practice may lead to excessive change and the faddishness that EIP seeks to challenge.

Very few leaders described using the research design or methods to evaluate the value of study findings or conclusions. There were several allusions to being aware of methodological debates – but, as many added, few felt they were in a position to adjudicate. Moreover, as one deputy head described – even with his science background and knowledge of statistics – reading a full paper can be dense and challenging. He is pleased when reliable sources provided meta-analyses or summaries with clear conclusions and action points. There were some examples of schools where a trained researcher is on the staff, or schools working in partnership with researchers on specific projects. These colleagues were highly valued for their in-depth knowledge and expertise. In the main though, and perhaps surprisingly for such a research-literate group, leaders tended to look to 'trustworthy' mediators to assess the robustness of research evidence. One director of teaching and learning summarised his overall approach:

> "...[we] look to see what its provenance was...we make some kind of judgement on the quality and the robustness of the of the research. Sometimes we're able to do it ourselves. Sometimes we get advice from academics about that. There are certain people who, if you like, are already mediators for quality control. And, you know, it's a shortcut to go to people who do that."

Leaders' Role in Curation, Filtering and Distilling

Some leaders described their engagement with evidence in terms of a more active role in filtering and shaping, rather than solely implementing evidence. Some described their own participation in research; here however, our focus is on leaders' intermediary role between research and practice.

Leaders accessing original research themselves described being cautious about presenting 'raw' research evidence (such as journal articles) for colleagues to read, and felt they had a role in summarising, filtering and relaying – and sometimes simplifying – research findings relevant to the school or context they were in. Leaders avoided 'bombarding' staff with research that is less relevant, inaccessible or that would create excessive workload, as this might generate negative attitudes towards EIP. They highlighted the importance of being selective and judicious with both the choices of evidence presented to colleagues and the conclusions to be drawn. Some guided staff towards important research with 'five minute reads' alongside signposting further reading for those with greater interest and capacity. In contrast, others, as one head teacher described, did not want to 'dumb it down' for staff: all of her teachers were degree educated, many with Masters qualifications, and she felt confident that they could engage with the content and style of research articles and reports.

We asked leaders about their criteria for choosing pieces to relay to colleagues. Their response, rather than relating to perceived quality of the research (see above), tended to focus on whether the approach was deemed likely to work in their own context and with their own colleagues; research was regularly rejected if leaders 'couldn't see how it could work'. Some leaders also recognised there was some need for expediency and providing evidence for which 'staff can see the immediate benefit to their students and their practice', even where this resulted in overlooking evidence which they felt had potential longer-term benefit. Many observed that EIP could be time-consuming and reduced capacity for other school activities and approaches to change and development. As one leader explained, committing to EIP was not about 'quick fixes'; there were often lengthy processes involved and no guarantee of new approaches having the desired impact.

Overall, there were a large number of considerations within leaders' decision-making around selecting evidence. These included their values and ethos; personal interests; school or departmental improvement priorities; and wider influences such as the direction of national policy or the inspectorate. Through experience, leaders had developed awareness of a range of considerations and possibilities. They had views on what was of value and what they needed from research. These views sometimes led to criticism of the research when it failed to deliver. Even a source held in high regard by many of our participants for its integration of practitioner-relevant evidence was critiqued by one leader for being primarily focused on teaching rather than 'broader education' topics. Similarly, another leader argued that there appeared to be a general lack of practical, up-to-date research on the best strategies for supporting pupils with specific special educational needs (SEN) such as autism.

Getting evidence into practice

Distance to Practice and the Role of Leaders

We asked leaders to describe the practical steps that they take to get research in to practice within their settings, the processes involved and their views on how it can be done successfully. Leaders described various steps and activities needed to operationalise, translate or develop evidence in order to move across the research-practice gap. Some had the confidence, expertise and capacity to work with raw evidence and transform it into to a usable form for colleagues, One leader, for example, described their role as being that of both a 'research broker and a knowledge broker', and felt able to independently lead and complete the

process from locating original research through to the presentation of strategies for teaching staff to implement in lessons. Others positioned themselves in a more intermediary role, preferring to locate, work with and share evidence summaries or practical guides. All leaders felt some degree of contextualisation, interpretation and operationalisation was needed to get evidence into practice; even defined and established programmes could not simply be taken 'off the shelf' and straightforwardly delivered. With few exceptions, evidence lacked the operational and subject-specific detail needed for immediate use by teachers. Many felt they had an important role in bridging this research-to-practice gap *before* dissemination to colleagues. One leader described using Coe et al's (2014) *What Makes Great Teaching?* report to create an evidence-based teacher development framework to support teachers at one of her MAT's underperforming schools. But she felt that 'there's nothing in between' the description of effective teaching in the evidence and realising it in practice; bridging this gap was a key role for research-active leaders.

The need to translate and transform research to make it relevant and usable was an important and recurring theme for our participants: leaders described this in relation to phase (e.g. primary or secondary), teaching and learning in specific subjects, school intake characteristics, particular classes, levels of teacher experience, enthusiasm and expertise, and school policies and improvement priorities. They also discussed more practical, operational details relating to CPD programmes, initiatives and projects which were vehicles for implementing approaches. Subject-specificity emerged as a key challenge (Cordingley et al., 2018). There was a sense that much of the research available to leaders was fairly generic in nature (focusing on broad topics such as assessment, metacognition, memory and principles of instruction). Leaders described the need to support teachers with understanding how research could be applied effectively within particular departments or subjects (and sometimes topics within subjects). One senior leader felt that it was difficult to judge if and how generic research applied in a particular subject area and whether evidence concerning one subject area could be transferred to another. He felt, on balance, that reviews and meta-analyses were best placed to provide a more fundamental and trustworthy principle, which could be applied widely, and this was of greater value than single studies which provided the concrete subject-specificity ultimately needed to get the research into practice. Many brought up the importance of subject hubs and middle leaders – as subject experts – for translating and implementing evidence in their departments. But, for some, this need for subject contextualisation led to concerns around *mis*interpretation of evidence-informed approaches. Many leaders were concerned that in translating, simplifying or adapting research for use in practice, the original findings or recommendations could easily become distorted or diluted to the point of being ineffective or harmful. One assistant head exemplified wider concerns as follows:

> "I suppose the risk is that the purity of the research becomes slightly distorted the further it goes into different areas of the school – you might go into Art and find something you said about retrieval practice looks completely different. And suddenly, you're not 100% sure whether it is the same thing anymore!"

Fostering Participation in Evidence-Informed Practice

We explored issues relating to effective distribution and diffusion of evidence within their school settings. The development of a whole-school culture committed to EIP was frequently reported as vital. Many leaders commented that, while they were perhaps viewed as a research leader in school, they were by no means operating in isolation; a shared and embedded approach to EIP required support from middle and senior leaders as well as collaboration between leaders and teachers. Some leaders talked about extending

this culture to include support staff, pupils and parents. Involvement in whole-school projects was seen as one valuable way of achieving this wider engagement. One leader, for example, described a university-led student wellbeing study involving all staff and pupils, and regular updates to parents. Equally, individual members of staff were often noted as being important for sustaining and progressing whole-school approaches. These tended to be teachers who had demonstrated (research or practical) interest and expertise, and had set-up and run projects or networks, contributing to the research culture of the school. Leaders highlighted the need for succession planning when these 'key players' moved on to new roles if these initiatives are to be continued.

This culture of collaboration and engagement tended to produce a shared language around evidence and EIP. Where new ideas and practices were being introduced, the language and terminology around these was often introduced and embedded across school. Frequent examples related to cognitive science or metacognition. Many described language as important for introducing new ideas and sometimes practices; one leader described the value of introducing this language to staff as providing 'a name for things' that many staff had already been doing, giving them confidence and justification for their existing practice. Many spoke about the need for a repeated message to sustain interest, embed practices and reach all staff. Different ways of doing this included regular signposting of evidence through channels such as school blogs or email updates, often accompanied with professional development activities in the target area. A 'drip feed' approach was described by a number of leaders, including one deputy head who explained the importance of subject leader meetings for developing ongoing engagement with EIP and revisiting core principles and messages: getting evidence into practice was a 'process not an event' and needed a long-term commitment.

As well as looking inwards to the school community for engagement and participation, many leaders noted the importance of fostering connections with external individuals and networks so that new ideas could then be 'cascaded' back at school. Encouraging collaboration between specialists in different areas (subject areas, SEN, behaviour) within MATs was viewed as one effective approach, as was supporting staff to attend practitioner-focused conferences. One leader highlighted the challenges that small schools can face in accessing high-quality training and development, but found that working with other nearby schools was an effective way for his team to engage with and share EIP. Returning to school to impart new information to staff was not always easy though. One leader outlined the challenges of reporting research and strategies back to staff after attending external events, especially to a group who were sceptical of specific approaches or to EIP more generally.

Implementation of Evidence

> "It is all very well to find good evidence and to translate good evidence and even to communicate good evidence. But getting practitioners to change their actual practice is the final and most difficult hurdle to get across."

As exemplified in the quotation above, leaders were well aware of the challenges of getting teachers to make changes to their practice. Many shared their approaches to creating clear and concrete channels for getting evidence embedded within teachers' practices. These tended to centre on building opportunities and

mechanisms into existing school systems and practices. Three main strands for evidence implementation emerged from our participants: CPDL, school policy and management.

Promoting EIP via high-quality professional development was a recurring theme reported by all of our participants. Examples of activities discussed included: a programme based upon the six highest impact strands from the EEF Teaching and Learning toolkit; training sessions using seminal research papers; and, the discussion of research articles in journal clubs. Many viewed practitioner research and 'lesson study' cycles as a good vehicle for contextualising and embedding evidence-informed approaches (see below for discussion of challenges in this area). Whether created by themselves, colleagues, or external experts, there was widespread agreement about the value of combining research and expert practice as part of professional development and learning. As one leader explained, 'seeing an experienced practitioner demonstrating something [is] far more powerful in shaping how [teachers] do things than engaging with a paper that might be quite abstract.' Across all approaches, many leaders discussed the challenges of finding time to work on CPDL activities with their staff. Sometimes this was in the form of extended twilight sessions; in other schools, leaders spoke about earlier finishing times for pupils and the use of that time for research-focused CPDL. One leader also shared the use of an 'enrichment day' when staff could visit another school to see evidence-informed practices in action.

Curriculum review and development was an area of school policy and practice frequently mentioned by school leaders, often referred to in light of the current focus in the new Ofsted framework (Ofsted, 2019). Leaders talked enthusiastically about the research-based content and pedagogical approaches that they had built into their curricula. These included elements such as 'mastery' teaching, use of quizzing at the start of lessons, and use of knowledge organisers. Others described how evidence linked to spacing and interleaving strategies had influenced the structure of their curriculum and its delivery. A number of our participants also urged caution, arguing that judgement was needed around *which* research should influence the school curriculum. There was a sense that to make judicious use of evidence, leaders needed to be able to critique the various approaches and strategies that are promoted as 'evidence-informed', and that (as mentioned above) 'off the shelf' curriculum packages often needed considerable adaptation in order to be relevant and accessible to the contexts they were to be used in.

Common school systems for the improvement of teaching and learning were also used as vehicles for implementing evidence-use. A number of these related to performance management and monitoring practices. In a couple of schools, staff were asked to identify an enquiry question or research objective to use as the basis for their performance management. This, leaders felt, allowed teachers to develop new expertise via a more personalised appraisal model. In another school, a lesson observation form had been developed with 'prompts' relating to strategies informed by cognitive science (e.g. retrieval practice, dual coding) to encourage inclusion of these during lesson planning and teaching across all staff. While there were concerns that this could lead to a 'tick box' approach (and see above for discussion of applying this across subject areas), the school leader felt that it provided a good starting point for discussions on using these strategies. Exercise book 'trawls' and lesson observations were other strategies cited by some leaders for monitoring and evaluating EIP. Many were keen to gain a level of consistency across the school in relation to how various strategies were being used. Departmental or school teaching and learning 'handbooks' were also used by some schools for sharing expectations around EIP; two leaders also outlined how they had changed their marking policy after reading evidence from the EEF and other sources. Some

reported being very transparent about use of the mechanisms described throughout this section. One leader, however, described a 'stealth' approach whereby he had amended departmental schemes of work to include evidence-informed approaches but was not making the evidential bases for changes explicit to his staff.

Developing Evidence for Practice

The above examples tended to relate to areas where leaders had research which provided a model of – or principle for – effective practice, and so the focus was more about how to contextualise and embed it within practice. Others though, positioned research evidence in a more partial and provisional role, as a starting point to work from, but not a definitive indication of what should be done in the classroom. These leaders felt that there was a more active part to play in understanding if, how, where, and why an evidence-informed approach might work in their particular context. In this subsection, we examine the more 'active' engagement leaders described in developing evidence for practice. We return to discuss the evaluation of EIP in the final section.

Teacher-led practitioner enquiry or action research was a key vehicle in many schools for EIP. Approximately half of the leaders we spoke to described some kind of practitioner research that had taken place within their settings. Like some of the CPDL work reported in the sections above, this was often presented as a way for teachers to develop ownership of their practice and professional learning, and to prioritise approaches that were successful for them in their own classrooms. In some schools, teachers were undertaking small-scale projects for external qualifications such as Master's degrees or leadership certificates (e.g. NPQSL); in others, teachers were encouraged to participate as part of their regular practice. Leaders described the value of teachers completing background reading on specific areas and then implementing, adapting and trialling approaches to understand their potential in the classroom. Some offered support with this through small financial contributions (for resources or teaching cover) or additional time off timetable. Many felt that practitioner research needed to be a core part of the CPDL approach rather than 'another thing to do', and that the process needed clear structure and guidance. Teachers were sometimes encouraged to share or publish their findings, disseminating good practice as well as incentivising engagement, completion and quality. In one school, teachers presented their completed projects to the leadership team who then chose the most successful to be added to the school improvement plan for further development and whole-school engagement.

Our interviews led to a number of interesting discussions around the value of practitioner research. Proponents viewed it as providing numerous opportunities for teachers to learn, develop and collaborate to improve their practice. One leader explained that teachers were 'not trying to write research...we're trying to find better and smarter ways of applying what we already know.' Their focus was on developing practice rather than in producing generalisable research findings that could stand up to tests of reliability or robustness. Other leaders were less positive and were concerned that inherent limitations of practitioner research prevented teachers from drawing useful conclusions or improving their practice. Issues raised included the subjective nature of the research; the measures and designs used to establish whether any impact had occurred; practical and ethical challenges of creating 'intervention' and 'control' groups; the limited range of topics which lent themselves to exploration through small-scale practitioner-led studies; and the extent to which it is possible to attribute impact amongst myriad pupil or school level factors within a small, selective sample. For these leaders, the challenges and lack of 'rigorous' findings to be gained from practitioner-led projects outweighed their potential value; such leaders instead favoured the development

of practice through engagement with approaches such as those detailed in the sections above. What was clear from all our discussions about practitioner research was that perceptions and practices in relation to its aim(s) and nature varied considerably, in particular in relation to its (various) potential for implementing, contextualising, trialling and/or generating research evidence.

Leadership of Evidence-Informed Practice

Perhaps unsurprisingly, our participants felt that successful implementation of EIP required strong leadership, needing somebody responsible for promoting research-informed teaching by championing research, sharing expertise, encouraging engagement and developing EIP. While all of our participants had designated middle and senior leadership roles within schools, few of them had research leadership as a stipulated part of their role. Despite this, they still felt that EIP was vital for being able to carry out other responsibilities (such as those relating to teaching and learning, assessment or management of staff) and therefore built research engagement and leadership in to their role wherever possible. Some felt that senior leaders were well-positioned to have influence over the direction of EIP in school, take responsibility for leading on new initiatives and building teams to support and deliver this work. A number of participants discussed setting up Teaching and Learning groups or Research Groups to share agency and responsibility across the school. In one setting, new members of the Teaching and Learning team were selected each year in order to contribute a steady flow of fresh perspectives, ideas and energy. Developing a core group of people 'as excited' as they were about using research to inform practice was at the heart of many of our participants' responses. For some, this was a vision yet to be realised, and they felt a sense of isolation and an 'uphill struggle' to get others engaged. As noted earlier, further research is needed to better understand the perspectives of those who – for both positive and negative reasons – feel that EIP has little to offer them.

The schools reporting sustained success with EIP tended to have secured engagement from staff at all levels. Leaders in these schools talked about the high value that they placed on a 'bottom up' approach, working with classroom teachers to determine the direction of EIP in school. One executive headteacher shared her experience of a member of staff coming to speak to her about her passion for play-based learning and the research work that was informing this through a masters course that she was enrolled on. With support from the head, the classroom teacher was given the opportunity to write an article on the approach for the staff newsletter and the head worked to secure the support of leaders at various levels and discuss the potential implementation elsewhere in the school and trust. Following agreement, the teacher devised an action plan and training for other practitioners across the trust schools and the approach was incrementally scaled. While initiated by a classroom teacher, the importance of leadership 'buy in' here was clearly vital to enabling this approach on a scale beyond that of the individual teacher.

With the leaders we explored some of the challenges around engaging staff who were less enthusiastic about EIP. Many described the task of persuasion in terms of 'shared language' as described above, some more in terms of rhetoric and culture change. There was a perceived need in many cases to actively 'sell the vision' and gradually work towards a culture of EIP. One leader felt that persuading all staff to engage was not always possible but that having a critical mass of interest was sufficient for innovation to occur. Most leaders were clear however that they did not want to impose or force new ideas or initiatives on people. Some shared examples of where them or their colleagues had felt that EIP was being 'done to them' rather than with them. One leader explained that this simply encouraged 'lip service' to EIP and led to limited or superficial change. There was a common view that strategies that had been forced on others

invariably failed or 'fizzled out', resulting in wasted time and a sense of confusion for the staff (and sometimes pupils) involved.

Many leaders spoke about the importance of being able to justify existing and new practices through the use of research, with evidence providing a clear rationale for the decision-making that existed in relation to, for example, the school's curriculum, pedagogical approaches and assessment policies. A number of our participants suggested that the use of research evidence provided a welcome alternative to reliance upon ideology or personal preferences for teaching and learning. While they found sharing evidence as justification for practices to be helpful, in some cases colleagues could not be persuaded, as explained by one Deputy Head:

> "…the challenge comes when you have somebody who is quite evangelical about the way that they need to do something, and they are…and they just… they won't shift. And they will reference their own sources of evidence."

This excerpt, and other experiences that our leaders shared, acknowledged the often complex and ambiguous nature of research and evidence for practice. There are rarely definitive 'answers' on the best approaches to teaching and learning, and so teachers were often prepared to challenge new initiatives if they seemed at odds with their own experience and existing practices.

Research evidence was also used to justify decisions and practices to others beyond the school teaching staff. One head explained that a combination of academic evidence and attainment data from school (indicating positive achievement for pupils) was needed in order for other senior leaders and governors to continue supporting certain approaches. For another primary head teacher, research was a way of defending the school's performance in the context of volatile or apparently low outcome data due to the small size of the school. He described using evidence to justify the educational *process* (i.e. curriculum and teaching methods) to parents, school governors and the inspectorate given the unreliability of their outcome data. Finally, other participants presented a view of using research to affirm their own decisions. There was a sense that engaging with research provided them with confidence and assurance that they were doing 'the right thing...the best for the children.'

The Impact and Value of Evidence-Informed Education

The sections above highlight leaders' engagement with research-informed practice and the significant work being invested in to this area by some schools. But what impact is EIP having for the schools, teachers and pupils involved? There was a spectrum of views relating to impact on pupil outcomes following engagement with EIP. A small number of leaders claimed that there was clear evidence of impact on their attainment data; several also reported wider benefits (beyond academic attainment) such as pupils' independence, engagement, confidence or self-regulation skills. However, the majority were circumspect about evidence of impact. They felt that it was either too early to judge or that quantifying improvements and firmly attributing them to EIP was challenging, and perhaps not particularly necessary.

In general, obtaining robust evidence of impact in the setting was not a major concern. There were only a small number of examples of robust attempts to evaluate evidence use in schools. In a couple of instances, leaders discussed projects with external partners (such as academic researchers) and the independent appraisal that they provided. In another school, leaders promoted the use of the EEF DIY Evaluation Guide to support teachers with designing and evaluating their own small-scale research projects. The principal way of assessing impact reported was through professional judgement drawing on routine school and classroom review and assessment practices. There was a sense from some that only a light-touch confirmatory approach was needed because evidence-based approaches (and especially those held to be fundamental, scientific, principles of learning) could be trusted from the outset; the job was to implement and to make them work *in situ*.

Trust, confidence and justification were recurrent themes in how leaders' judged the relative claims of experience versus evidence as arbiter of practice. Many were confident that the research that they chose to engage with put them in a 'powerful position' to determine effective approaches but also crucially to 'get rid of the nonsense.' Participating in wider research-related networks (via social media, CPDL activities, and school-to-school links) reinforced this confidence to implement evidence into practice. There was wide agreement that moving away from approaches which relied *solely* on practitioners' prior experiences or preferences, using evidence to support decisions and shape practice, was valuable for professional effectiveness and credibility. Many spoke about the benefits of EIP in terms of empowering teachers to understand, question and justify their practice and reported wider benefits of increased professional efficacy, and a more collaborative culture. There was a view that committing to EIP could be a core driver of whole-school change and professional culture. This support extended for many to a general ethic of EIP as an important component of professionalism: many leaders held that using evidence to inform practice was 'the right thing to do', even when the impacts on pupil outcomes were unclear. Some leaders felt, as an issue of fairness, that all pupils should be entitled to the highest quality, evidence-informed teaching and learning, and that there should be a consistent approach taken by all staff. Moreover, rather than being 'another thing to do', evidence was held by many as a tool of professional empowerment, an opportunity for practitioners to take control of a professional knowledge base which they could use to resist educational fads and external intervention.

The view that evidence could enhance professional judgement and effect significant educational improvement was however neither absolute nor unequivocal. The majority of our participants expressed a degree of scepticism, cautioned about the limitations of EIP and placed some boundaries on its potential. One leader, for example, observed that schools can be excellent without EIP and struggle even with strong EIP; the evidence – he explained – was never going to be definitive and inevitably left considerable space for professional judgement. Nonetheless, evidence could help to 'whittle it down a little bit and identify stuff that's a waste of time'.

Differences of opinion were most apparent and most jarring when it came to the question of the best course of action when professional judgment and evidence were in opposition. Some felt professional judgement should take primacy; others felt that – where it was sufficiently strong – that the evidence should.

> "I think if the evidence directly contradicts what people – through either their experience or their hunches – believe to be true, that one should pay attention to the evidence. You know, I

> think there comes a point where the evidence is robust enough, where one has to say there is a limit to professional judgement."

In the view of the present authors, the evidence bases for effective educational practice and for putting this evidence into practice are not yet sufficiently strong. Nor is EIP demonstrably effecting significant and widespread educational improvement at present (see also Chapter 2). As we have explored throughout this chapter, leaders still report considerable variability and uncertainty around what constitutes EIP, what evidence to draw on and how to get evidence into use in a reliable way. There was however a real sense of optimism about the potential of EIP and an eagerness to explore how to better harness it for educational improvement. This is a sentiment we share. We would like to thank the leaders who spoke with us for supporting us to shine a light on this important and complex area of educational leadership.

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