Research informed practices in English Schools: Educational Excellence Everywhere?

Introduction

This article reviews the English Government's policies regarding the role that educational research should play in the school education system. Education policy since 2010 is outlined, followed by an analysis of the policy direction as stated in the 2016 White Paper "Educational Excellence Everywhere". The role that research evidence is proposed to play in educational reform in England is explored. The extent to which a technicist, 'what works' view of teaching versus a more empowering version of professionalism are promoted in this White Paper is revealed. Implications are drawn for the teaching profession, universities and schools.

Context

International studies show a growing appetite for research use among educational leaders and decision makers (NTRP 2011; Cooper and Levin 2013; Penuel, Briggs et al. 2016). In this context, the UK research community has conducted a wideranging inquiry into the role of research in the education system (Furlong 2014). The report has proposed a way forward through an enquiry and research-focused teacher professionalism. The BERA-RSA report makes this explicit thus:

- "Internationally, enquiry-based (or 'research-rich') school and college environments are the hallmark of high performing education systems.
- To be at their most effective, teachers and teacher educators need to engage with research and enquiry – this means keeping up to date with the latest developments in their academic subject or subjects and with developments in the discipline of education.
- Teachers and teacher educators need to be equipped to engage in enquiryoriented practice. This means having the capacity, motivation, confidence and opportunity to do so.
- A focus on enquiry-based practice needs to be sustained during initial teacher education programmes and throughout teachers' professional careers, so that disciplined innovation and collaborative enquiry are embedded within the lives of schools or colleges and become the normal way of teaching and learning, rather than the exception."

(Furlong, 2014 p.6)

This ambition for schools and the teaching profession can be set alongside what has happened in recent government reforms. Later, the article applies some of these

dimensions to the direction of travel as contained in the most recent legislation. First, the policy background to date is outlined below.

Education policy from 2010-2016

In the 2010 White Paper, 'The Importance of Teaching' the message from the coalition government in England became one of 'freeing-up' schools to improve themselves. As Michael Gove, the newly instated Minister for Education described:

"the attempt to secure automatic compliance with central government initiatives reduces the capacity of the school system to improve itself. Instead, our aim should be to support the school system to become more effectively self-improving. The primary responsibility for improvement rests with schools, and the wider system should be designed so that our best schools and leaders can take on greater responsibility, leading improvement work across the system."

(DfE, 2010, p. 13).

Critics of the UK Government approach have argued that the adoption of a self-improving system (Hargreaves, 2010) is underlined by a range of sometimes competing narratives. On the one hand is the idea of the 'freedom to teach', and the creation of roles that are aimed at reform through lateral collaboration and system leadership. On the other is a heavy handed 'no excuses' environment of punitive accountability and a strongly market-based approach (Greany 2014).

One outcome of the 2010 policy was the creation of National Teaching Schools (usually called Teaching Schools), designed to be the hub of Teaching School Alliances (TSAs). The first cohort of 120 TSAs started in the year beginning September 2011, increasing each year to the present figure of 692 Teaching Schools across 538 TSAs. Many include within their TSAs, non-school organisations too, such as local authorities or Higher Education Institutions (HEIs). The 'big six' objectives for Teaching Schools are wide-ranging:

- 1. Lead the development of a school-led initial teacher training (ITT) system, either through School Direct or by securing accreditation as an ITT provider
- 2. Lead peer-to-peer professional and leadership development (continuing professional development)
- 3. Identify and develop leadership potential (succession planning and talent management)
- 4. Provide support for other schools
- 5. Designate and broker Specialist Leaders in Education
- 6. Engage in research and development (R&D) activity

(NCTSL, 2014)

In practice, the R&D strand has become less one of the 'big six' and more seen as a way to underpin the other five; organisations successful in achieving Teaching School designation are expected to:

 "show evidence of engagement in research and development which reflects agreed priorities, builds on existing external research/evidence, and contributes towards the alliance's overall priorities

- ensure that new initiatives within the alliance are based on existing evidence and include a rigorous evaluative focus, drawing on external expertise
- demonstrate an ability to work with other teaching schools on research and development activities as part of regional or national networks where appropriate
- ensure that existing evidence can be accessed and used by staff and that appropriate staff have the time and support needed to undertake research and development activities
- effectively disseminate learning from research and development work across the alliance and the wider school system" (NCTSL, 2014)

The 2010 White Paper also led to the rapid expansion of the academies programme. Following closely the models of Charter schools in the USA, there schools are formally detached from Local Authority control. Many academies belong within larger multi-academy trusts (MATs) which have central teams that oversee teaching and learning, leadership development, financial issues and so on, to varying degrees of control and prescription.

In these new school and network structures, research leadership roles have become increasingly common. These act as catalysts for school and network research activity, provide ongoing focus and support to practitioners and mobilise research knowledge among staff. In addition, a mode of professional development known as joint practice development (JPD) has been promoted as a mechanism to achieve within and between school improvement (Fielding and Britain 2005; Hargreaves 2010). A number of models for JPD are becoming more common in England, such as action research or lesson study (Hammersley-Fletcher, Lewin et al. 2015). This enquiry-based approach implies a role for practitioners not only as passive 'users' of research evidence produced elsewhere but as active knowledge creators and interpreters, with improvements coming about through a process of knowledge exchange and conversion (Nonaka, Takeuchi et al. 1996; Paavola and Hakkarainen 2005).

One significant outcome of the coalition government's work (2010-2015) was a conscious move towards promoting evidence-based practice (EBP). To relation to this, the government commissioned a report by a popular author with a medical background (Goldacre 2013). In "Building evidence into education", Goldacre called for an architecture to support evidence-based practice. He supported the widespread use of randomised controlled trials (RCTs) and suggested that teachers, like doctors, ought to form journal clubs.

The government's emphasis on EBP is also evident in the setting up of What Works Centres (WWCs)¹. The National Institute for Health and Clinical Excellence (NICE) and five other WWCs in areas including the economy, crime and well-being form a What Works Network funded by a combination of government and non-governmental sources. Set up by the Sutton Trust and the Evidence Endowment Foundation (EEF), the WWC seeks to emulate the approach of the already long-established NICE in constructing an evidence base for educational professionals to use in decision-making. The desire to create an evidence-base that is easily communicable

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 $^{^1\} https://educationendowment foundation.org.uk/about/what-works-network/$

to school leaders and practitioners had also led to the set-up of the Teaching and Learning Toolkit². This aims to improve educational outcomes for children by:

"generating and synthesising evidence about educational innovations, and encouraging schools, government, charities, and others to apply evidence and adopt those innovations found to be effective"

(What Works Network 2014)

The EEF has supported a large range of RCTs since 2011, having become one of the best sources of funds for educational research in the last few years in England. However, some have argued that the government's approach to EBP has privileged certain types of research evidence over others (particularly meta-analyses and RCTs) and has encouraged prescriptions about 'what works' based on narrow conceptions of school effectiveness (Biesta 2007, 2010). The extent to which this approach continues to be taken by the present government is addressed later by analysing the 2016 White Paper. Before doing so the article first outlines a position for how research evidence could and should usefully underpin teacher professionalism.

How can research enhance teaching practice?

A useful way to look at this is to contrast evidence-based practice (EBP) with evidence-informed practice (EIP) and research-informed practice (RIP). This can also be characterised as a conflict between a 'what works' role for research evidence in education with a rather more nuanced one, in which practitioners play a more active and critical role (see Atkinson 2000; Sanderson 2003; Walter, Nutley et al. 2005; Biesta 2007; Davies, Nutley et al. 2007; Biesta 2010; Biesta 2010; Nelson and O' Beirne 2014; What Works Network 2014; Hattie 2015).

The EBP model suggests a technical-rational professionalism in which expert knowledge resides in the academy and underpins the way practitioners work (Schön 1983). In this model, the work of the practitioner is to use this knowledge to closely guide action, following protocols for effective practice and by which to judge quality of implementation. The roles for academics and practitioners are seen to be quite distinct and separate in this model. The type of evidence valued in the EBP model is usually beyond the scale, time or resources that would be achievable for practitioners to actively engage in, except as research participants. academics provide the evidence and practitioners work out how to implement or 'use' it. Once the evidence base has been determined (by academics) as 'rigorous' enough, and of high quality, it suggests a fairly indisputable value for practitioners. This is because such research will be seen to be high in its explanatory power, demonstrating clear links between causes and effects. As a result, teachers are seen to be unprofessional if not clearly acting on such evidence. The power relationships are clear in this model; practitioner knowledge is seen as lower in the hierarchy than academic knowledge. The latter becomes foundational for professional teaching practice.

² https://educationendowmentfoundation.org.uk/evidence/teaching-learning-toolkit

One of the problems with this way of thinking is that it suggests an incomplete world view, adopting a mechanistic or engineering analogy; a reductionist mode of inputs and outputs. This fails to capture the way that human actors interpret and make sense of the world around them (Biesta and Burbules 2003). Naturally, people will turn to research to provide answers to the link between causes and effects. However, while research can capture relationships between these 'inputs' and 'outputs' this merely reflects the choices of participants in the world (e.g. teachers and students) whose actions lead to certain consequences in a given situation and time. In other words, practitioners have agency and subjectivity, they chose their actions based on a range of factors in the environment. Cause and effect chains can be relatively stable or they might change due to context. In other words, research based educational knowledge is 'fallible' (Hammersley 2004; Hammersley 2005), capturing a reality that is temporal (Biesta and Burbules, 2003). By corollary, as has been argued elsewhere (Saunders 2004; Saunders 2006; Saunders 2015), teaching needs to be viewed as a creative endeavour that can never be usefully determined by a monolithic knowledge base generated through external research.

While research should not lead to prescriptions for action in a linear, instrumentalist sense, it can have a 'cultural' or 'conceptual' use in educational improvement (Biesta 2015; Cain 2015). This is akin to an 'enlightenment' purpose (Weiss, 1998); or at least a 'moderate' form of enlightenment (Hammersley 2002, cited in Cain, 2015, p. 480) in which research knowledge is 'mixed' with other forms of knowledge, such as that gained from watching other colleagues or by reflecting on one's own experiences. For this reason, many authors prefer the term 'evidence-informed practice' (Brown 2013).

While evidence-informed practice is a broader and more useful term than evidence-based practice, on its own it does not take place sufficient emphasis on an active, enquiry stance to teacher professionalism (Cochran-Smith and Lytle 2001). The important features of an 'enquiry' approach are: i) an orientation to professional learning that is initiated and driven by the curiosity, and concerned with the actions of the teacher (and usually the effects of these on students) rather than one where knowledge is externally 'transmitted' by an expert or through a piece of research, ii) that there is an intention to learn and interpret actions and their consequences that is less spontaneous and more 'visible' than would otherwise be the case in day-to-day reflections on, and in, practice. This means that practitioners not only take a critical view of published research but also engage in their own enquiries into practice. Therefore, it is useful to add the notion of research-informed practice (RIP). RIP includes the role of theory as well as the findings of research (see table 1, below).

Table 1: Evidence-based versus research-informed practice

Evidence-based	Research-informed
Technical-rational view of teaching ('what works' model of education)	Teaching as an art (or craft) as well as a science
Research discovers one truth ('Scientists say') Reliance on large-scale, generalizable, quantitative evidence and systematic reviews	Research findings are open to multiple interpretations – not one 'voice' Published academic research seen as a useful starting point (hypothesis to be tested)
Neglect of theory	Theory included
Focus entirely on outcomes (especially pupil attainment)	Education is a process as well as an outcome
(Source: Godfrey 2016).	

The BERA-RSA inquiry (Furlong, 2014) stated that teacher professionalism should derive from: i) subject and pedagogical knowledge, ii) practical experience, and iii) research literacy – the last of these involving both: research-based knowledge, theory and scholarship; and research related skills and enquiry (Furlong, 2014, p. 10). In this, the authors provide a view of professionalism that is both research and evidence-informed and quite different to the left hand column in the table above.

The role of research in terms of 'informing' judgement implies the rejection of a positivist, realist ontology for education (e.g. Biesta, 2015; Brown, 2013; Cain, 2015; Hammersley, 2005). A socially based ontology allows for a greater role for practitioner agency. Research evidence can be seen to inform teachers practice in one 'long-focused discussion' in which it forms a third voice, the other two being one's own thoughts, values and experiences (first voice) and those of colleagues (second voice) (Cain, 2015). Cain provides examples of how teachers' use of research texts informed their work conceptually, by: providing a focus for thought and action; challenging existing thinking and practice; providing concepts that made phenomena visible and suggesting possibilities for action. Research also influenced teachers' thinking in that it made them: more willing to experiment; more critical about knowledge claims, better able to make sense of a range of evidence and in developing ethical awareness (Cain, 2015, pp. 487-488).

The three terms are defined in this article as:

Evidence-based practice:

"teaching practice or school-level approaches that are based upon the results of evidence about interventions or strategies that are effective in helping pupils to progress." (Nelson and O'Beirne, 2014).

Evidence-informed practice:

The systematic combination of academic research, practitioner enquiry such as action research or lesson study and other routinely produced school data. (Adapted from Brown, C., et al, 2017 p.132).

Research-informed practice:

An actively enquiring mode of professionalism that involves critical reflection and engagement in ('doing') and with ('using') academic and practitioner forms of research, taking into account both the findings and theories generated from them.

Leadership and organisational dimensions

For evidence and research-informed practice to flourish requires a leadership and organisational perspective too. Leaders need to build the structures and cultures of the 'research rich' environments in which:

"organization members value research as a resource for decision making, select strategies using evidence, remain open to change in light of evidence, and enact multiple social supports and norms promoting evidence use"

(Penuel, Briggs et al. 2016).

Research-engaged schools are an important linchpin concept in a research-informed eco-system (Godfrey, 2016, Dimmock 2014). Such schools promote spaces for collaborative learning that allow for knowledge creation linked to the needs of the pupils and around carefully articulated ideas about education and its intended outcomes. Research-engaged schools bring together a solution to three connected problems pressing the school system in England and elsewhere:

- How to bridge the research–policy–practice gap by mobilising knowledge more effectively through knowledge producers and consumers working collaboratively
- 2. Valuing and integrating both tacit knowledge and academic coded (explicit) knowledge
- 3. Raising the professionalism and reflectivity of teachers and leaders

(Adapted from Dimmock, 2014, p.1)

Below, this article examines the specific ways in which research evidence is positioned in the 2016 legislation, Educational Excellence Everywhere. The analysis makes reference to the above distinctions made between EBP, EIP and RIP and the extent to which such practices are being incentivised in the structures and cultures of schools and their networks.

Analysis of the 2016 White Paper, Educational Excellence Everywhere

The 2016 government legislation sets out:

"[a] vision to achieve educational excellence everywhere, by providing a world class education to all children, regardless of their location, prior attainment, needs and background"

(DfE, 2016b, p.3)

The government seeks to address this by continuing with the 2010 policy direction of promoting academies, reforming teacher training and changing the curriculum. It is beyond the scope of this article to address every aspect of this wide reaching legislation; here the focus is on what the 2016 White Paper Educational Excellence Everywhere (EEE) says about the role of research.

The 2016 White Paper goes further than the 2010 one in spelling out the role for research evidence in the education system. This is shown through the greater frequency of the terms 'research' and 'evidence'; there are 82 instances of the term evidence and 18 for research in the 2016 White Paper (out of 44,155 words) compared to 28 instances of the word evidence and 19 of research in the 2010 document (39,052 words). However, the term evidence-based dominates compared to evidence-informed. See table 2 below:

Table 2: Frequency in use of terms 'evidence-informed' vs. 'evidence based' in the 2010 and 2016 White Papers:

Term	Frequency in 2010 White Paper (IOT)	Frequency in 2016 White Paper (EEE)
Evidence-informed/informed by evidence (followed by any term or ending in this)	0	2
Evidence-based/based on evidence (followed by any term or ending in this)	1	25

The 2016 White Paper refers twice to an 'evidence-informed teaching profession', but these are the only examples of this usage throughout the rest of the paper. EEE suggests a number of forms of EBP. See table 3, below:

Table 3: The uses of 'evidence-based' in the 2016 White Paper

Context	Frequency
Evidence-based practice	6
Evidence-based teaching	2
Evidence-based strategies	3
Evidence-based teaching materials	2
Evidence-based support	2
Evidence-based interventions	2
Evidence-based professional development	2
Evidence-based approaches to character	1
development	
Evidence-based opportunities	1

Most of the examples of this language are too general to draw any conclusions about how they should be understood. However, a few will be addressed below. The White Paper gives an 'illustrative example' of how a teacher might experience their career in 2020:

"Chris graduates from university and gets into teaching through a School Direct course run by a multi-academy trust that has been accredited to deliver school-based training. His initial training builds on the deep subject knowledge he acquired in his degree, and trains him in the most effective methods of teaching his specialist subject. It also gives him a firm grounding in understanding and applying evidence-based practice." (DfE, 2016a, p.34)

Interestingly here, the role of the school in showing the teacher trainee how to teach their subject implies a knowledge-base of subject pedagogy that teacher trainers may or may not have any grounding in themselves (Burn and Mutton 2015). The 'understanding' of the evidence-base at least suggests a role for teacher research literacy, however there is no suggestion here that this 'evidence' may be open to interpretation or challenge.

One example of an 'evidence-based strategy' given in the White Paper is the use of research evidence to determine how to spend money on poorer pupils. In this context, it is important to recognise that research use is sometimes driven by a need to justify actions already decided on (Weiss and Bucuvalas 1980). So, while 67% of school leaders now consult evidence in deciding their pupil premium priorities, nearly half of them refer to the Sutton Trust/EEF Toolkit (Ager, R. and Pyle. K., 2013). This search for evidence may well be tactical, motivated by the need to show an evidence-based approach to spending pupil premium funds to the school inspectorate, Ofsted. This over-reliance on one source for this evidence may also provide an inadequate picture of the issues they are seeking to address.

An example of evidence-based decision-making is in their rationale for a new 'national curriculum for the 21st Century'. Using selective evidence from cognitive science (William 2006, 2009) they justify the government's 'knowledge-based' for the core curriculum:

"the national curriculum will no longer be a decree, but a benchmark. It will serve an important role in setting out the sort of knowledge-based, ambitious, academically rigorous education which every child should experience."

(DfE, 2016a, p.90)

This quote conveys quite contradictory messages, first is an assertion about the need to increase professional autonomy in schools, which is then tempered by a clear steer to what this core knowledge should be, giving examples of 'Shakespeare plays' and a 'computer science curriculum' (p.90). Their position about the underemphasis on learning knowledge, erects a straw man argument against 'progressive educators' that has been used elsewhere (Christodoulou 2014). It is also unclear on which 'evidence' their choices for such curriculum content are warranted.

In terms of 'evidence-based teaching materials' the ambition to, "encourag[e] greater use of evidence-based teaching materials to raise standards and cut unnecessary workload" (DfE, 2016a, p.90) seems a worthy one and no doubt would be much in demand by an over-stretched school workforce. However, the stated desire to allow teachers more freedom to choose how to teach 'that' material is followed by the suggestion that publishers should work with MATs to produce it. No mention here is made of the need for academics to work with teachers or publishers to produce this material. Rather than saving time by employing teaching practices that are optimal, the point here is that the time saving comes from teachers not 'reinventing the wheel' and by adopting standardised resources.

By contrast, a reference to 'evidence-based support' sounds rather more empowering and closer to the definition of evidence-informed practice. The example given to illustrate this is Parkfield Community School in Birmingham. Here, the school has conducted its own analysis to show how, "pupil premium pupils without a computer at home were falling behind in mathematics, and finding it difficult to complete homework" (DfE, 2016a, p.117). The school's solution was to start a maths breakfast club for these pupils and this significantly increased attainment. The point here is that the case study illustrates how a school analysed its own data, and proposed its own solution to this, rather than reading published academic research or following an evidence-based intervention.

The 2016 White Paper makes frequent reference to 'what works', often as 'evidence of what works' or 'research about what works' or 'what works best'. See table 4, below:

	Table 4:	The uses of	'what works'	in the White Paper
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Context	Frequency
Evidence on/of what works	6
(being up to date with) what works best	4
(EEF) What Works Centre (s)/Networks	3
Scale up/spread what works	2
What works in education	2
The best school leaders know what works	1
What Works Networks	1
What works and what doesn't	1

The table above illustrates the centrality of What Works Centres in government thinking. Eleven references are made to the EEF in the 2016 White Paper, mostly in relation to the production of evidence about 'what works'. This suggests a continued reliance on a medical model in which the effectiveness educational interventions or 'treatments' can be ascertained through RCTs. This message is emphasised by referring back to the 2013 report on Building Evidence into Education (Goldacre, 2013):

"There is a huge prize waiting to be claimed by teachers. By collecting better evidence about what works best, and establishing a culture where this evidence is used as a matter of routine, we can improve outcomes for children, and increase professional independence".

(DfE, 2016a, p. 38).

While this quote points to the need for a culture of research use, it downplays the role of teacher agency and autonomy, rather suggesting that once teachers 'find' this (incontrovertibly true) evidence and simply put it to use, they will be doing their jobs as professionals. Another striking example of 'what works' thinking, is shown where the White Paper admonishes educators who fail to teach literacy in the way the evidence dictates they should:

"Despite decades of research showing its positive effects [on outcomes in literacy], systematic synthetic phonics had been disregarded by many schools, local authorities, and university education faculties." (DfE, 2016a, p 38)

The criticism of universities and local authorities in this quote suggests little regard for how either could help the government achieve its educational reforms. The imposition of a phonics reading check (DfE, 2016a, p.38) also makes it clear that educators are not to be trusted to implement this evidence-based solution.

What the White Paper says about teachers as enquirers

Despite the 18 references to 'research' in the report, there are no references to research-informed practice/teaching or education, nor are there any references to teacher research or teacher-researchers. There are no mentions of 'enquiry' or for teachers or schools to adopt an 'enquiry-focus', which forms the pillar of the BERA-RSA report's vision for teacher professionalism (Tatto and Furlong 2015). However, while the White paper admits that,

"it is not yet as easy as it should be for teachers to find and use evidence to improve their teaching practice", and that "too little research is directly driven by the priorities of teachers and schools." (ibid, p.39), it goes on to state the well-rehearsed reason that, "the evidence base is patchy, difficult to access or to translate into action" and "too little is sufficiently robust in quality." (ibid, p.39).

Such comments appear not to have advanced the arguments since Hargreaves' comments at the Teacher Training Agency lecture 20 years ago (Hargreaves 1996) and presumably lay much of the blame for this on universities and the educational research community. They also fail to address how the government will support educational practitioners to engage *in* and *with* research in ways that would inform their pedagogy.

The White Paper does at least commit to supporting the new College of Teaching in the publication of a new British education journal designed to emulate the British Medical Journal in medicine and to help teachers implement effective practices through the publication of international research in accessible formats (DfE, 2016a, p.13). The White Paper also supports the seting-up of a portal for teachers to access education journals. These are welcome developments that ought to help teachers in England to access research evidence throughout their careers and addresses a long standing deficiency.

The role of universities

The position on the role universities in the provision of Initial Teacher Training (ITT) appears to have shifted somewhat since 2010, suggesting that: "We want the best universities to establish 'centres of excellence' in ITT, drawing on their world-leading subject knowledge and research." (ibid, p. 31). This can be seen as a softening of a stance that is seen by some as a way of stripping away power from universities and the theoretical basis for the profession (Winch, Oancea et al. 2013). However, the promotion of Tom Bennett to conduct a review of practice in ITT and to advise on behaviour management (DfE, 2016a, p.37) is a curious one; the government turning again to a popular author (Bennett, 2013) rather than giving this responsibility to a university based academic.

The role of school-based research

In terms of what the White Paper says about promoting school-based or practitioner research, its principal aim appears to be to increase the spread of Teaching Schools around the country. This is one of the key strategies to build capacity for improvement in areas currently under-served by Teaching School Alliances. The intention to include another 300 is indeed an ambitious target. In terms of the research role of these schools and alliances. Among the 29 references made to Teaching Schools, this includes examining: "the feasibility of incentivising teaching schools to publish their research and CPD materials on an 'open-source' basis" (DfE, 2016a, p. 13). This commitment to encourage the mobilisation of research knowledge falls short of committing money to helping or supporting them to do this.

The White Paper does not fundamentally address the cultural and structural issues required to create a system of schools actively engaged in and with research. For instance, there is no mention of support for school or network research coordinators, or of the role of universities in providing critical friendship. There is no mention of the role of academics in developing instruments or processes that support the evaluation of school pedagogy or policy. Indeed, while universities are mentioned frequently in the Paper (41 times), there is not a single reference to how they might support school-based research. Peer review or lesson study, both key ways that teachers could work collaboratively to develop practice in a school-led self-improving system also go unmentioned in the report. The White Paper does suggest recruiting maths and physics teachers from post-doctoral researchers, who would combine teaching with further study in their universities (p.26). However, this falls short of the kind of role that would combine teaching and researching in order to improve school pedagogy or practice, such as using embedded doctoral researchers (McGinity and

Gunter 2012; McGinity and Salokangas 2012; McGinity and Salokangas 2014; Rowley 2014).

Conclusions

Overall the policy language in Educational Excellence Everywhere strongly emphasises an evidence-based practice model. This falls short of the kind of teacher professionalism informed by research called for in the BERA-RSA review. While the government's rhetoric supports professional autonomy, this message is in danger of being overwhelmed by the simultaneous support for a top-down model of knowledge production that promotes a disempowering prescription to practice. Teachers are not just being told to listen to evidence, they are being told which evidence to listen to and which to ignore. As such, we are in danger of reaching a 'tipping point' (Biesta 2015) where we elide the reflexive, agentic and purposeful nature of those who work within the education system— especially teachers.

What the government themselves have shown in the promotion of one type of curriculum is the key weakness in the EBP approach; i.e. it fails to spell out that values rather than evidence dictate the direction of educational policy and practice. Therefore, rather than being 'led' by evidence, teachers and school leaders need to be guided by values formed from within the profession. If these values are not articulated, evidence can be used to 'dictate' how teachers teach. To return to the example of teaching literacy, some researchers have suggested that a reliance on using synthetic phonics affects attitudes to reading in future life (Cain 2015). Here, there is a tension between the more immediate pupil attainment goals and the emancipatory aspects goals of education. The reliance on quantitative data about academic achievement risks an approach that focuses on what is easy to measure rather than what is necessarily the most important.

One challenge is for the College of Teaching to provide a strong, independent voice to the profession and support for teaching as a research-informed practice. The government White Paper has at least proposed an improvement to teachers' access to academic literature. However, the uptake of research is not only a question of access, it is also determined by attitudes toward research and knowledge of how to interpret conclusions (Penuel, Briggs et al. 2016). This needs to be supported by the experience of teachers in schools and by the stated standards from within the occupation itself. Research in the USA shows that leaders were most likely to access research through professional associations and professional conferences than through individual researchers or from the three big U.S. Department of Education resources: What Works Clearinghouse, the National Center for Education Statistics, or the Regional Educational Laboratories (Penuel, Briggs et al. 2016). The equivalent professional associations for school leaders and teachers, subject associations and TSAs should thus play a bigger role in promoting the mobilisation of research in England. The government's choice of the new College of Teaching as the home of the new British Education Journal is at least a sound on in this respect and a good point from which to build.

Some signs of optimism also come in a report by the National College of Teaching and Leadership on evidence-based teaching (Hammersley-Fletcher, Lewin et al. 2015). While using the language of EBP, the authors recommend a variety of ways to encourage evidence-based teaching, such as lesson study, research cafés, Teach Meets³ and journal clubs. This suggests a more nuanced understanding of the relationship between teaching and research evidence, including the role of collaboration, enquiry and social networking. If the support base for such roles can grow, with the aid of university support and strengthened professional bodies, the role of professionals in an evidence and research-informed system may yet come to greater fruition. It is up to the government now to decide whether there will be funding or incentives built into the school system to promote such activities.

Worryingly, the White Paper shows a distrust of the educational research community and universities in leading improvement in the system. Here, they are failing to capitalise on a wealth of expertise that could help schools achieve greater success, particularly through research engagement. An evaluation of Teaching Schools suggested that uptake of research activity varied considerably, although the majority were promoting research and development; and the most promising R&D projects involved cooperation with a HEI (Gu, Rea et al. 2016). However, the authors of the evaluation also raise concerns that reflect long-standing findings elsewhere about school-university partnerships, such as lack of time for research cooperation and difficulties in sustaining links over the long term (e.g. Darling-Hammond 1994; McLaughlin and Baumfield 2006; Katz and Earl 2010). In order to ensure the type of processes that allow for high quality professional learning to occur there is a role for HEIs to facilitate or act as critical friends with schools or groups of schools (Swaffield and MacBeath 2005).

To build the social and professional capital required for intensive research use within and across schools requires trust (Leat, Reid et al. 2015; Brown, Daly et al. 2016). However, there remains a tension between the pursuit of public good through research-engagement and the desire for one school or network of schools to gain market advantage over their competitors. The latter situation is likely to depress improvement and innovation in the system (Greany, 2016). Therefore, if the government wishes to promote educational excellence everywhere through evidence-informed change, it will require a coherent policy direction that enhances cooperation between schools and collaboration with universities, while supporting authentic teacher professional autonomy.

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³ http://teachmeet.pbworks.com/w/page/19975349/FrontPage

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