

A sepia-toned photograph of a classroom. In the foreground, a young child is shown in profile, resting their chin on their hand and looking thoughtfully towards the right. In the background, other students are seated at desks, some holding pens, and a whiteboard is visible. The overall atmosphere is one of quiet concentration and learning.

## **RESEARCH AND THE TEACHING PROFESSION**

### **Building the capacity for a self-improving education system**

Final report of the BERA-RSA Inquiry into  
the role of research in teacher education

# **Research and the Teaching Profession**

Building the capacity for a  
self-improving education system

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**FINAL REPORT OF THE BERA-RSA  
INQUIRY INTO THE ROLE OF RESEARCH  
IN TEACHER EDUCATION**

The Inquiry makes the case for the development, across the UK, of self-improving education systems in which all teachers become research literate and many have frequent opportunities for engagement in research and enquiry. This requires that schools and colleges become research-rich environments in which to work. It also requires that teacher researchers and the wider research community work in partnership, rather than in separate and sometimes competing universes. Finally, it demands an end to the false dichotomy between HE and school-based approaches to initial teacher education.

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# FOREWORD

This final report of the BERA-RSA Inquiry into Research and Teacher Education builds on our interim report *The Role of Research in Teacher Education: Reviewing the Evidence*, published in January 2014, and marks a further important step in the future development of the teaching profession in the United Kingdom.

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Our organisations have come together to consider what contribution research can make to the development of teachers' professional identity and practice, to the quality of teaching, to the broader project of school improvement and transformation, and, critically, to the outcomes for learners: children, young people and adults, especially those for whom the education system does not currently 'deliver'.

As I remarked in the Foreword to the interim report, we have set ourselves the task of asking precisely what the contribution of educational research and enquiry should be – to initial teacher education, to teachers' continuing professional development and to school and college improvement. We also wanted to know how different initial and continuing teacher education systems across the UK and internationally currently engage with research and enquiry, and, most important of all, what international evidence there is that linking research and teacher education is effective. We asked, "Does research really improve the quality of the teaching profession and beyond that the quality of students' learning experience?" It was with these questions in mind that BERA and RSA jointly launched this Inquiry in spring 2013.

In the interim report we brought together the evidence that we had gathered to that point, evidence that addressed each of these important questions. And what the interim report makes clear is that there is a vitally important and consistent story to tell about the relationship between research and teachers' initial and continuing education. Research and enquiry has a major contribution to make to effective teacher education in a whole variety of different ways; it also contributes to the quality of students' learning in the classroom and beyond. Teachers and students thrive in

the kind of settings that we describe as *research-rich*, and research-rich schools and colleges are those that are likely to have the greatest capacity for self-evaluation and self-improvement.

In this final report, we have gone further – testing the evidence offered in the interim report with a range of stakeholders – classroom practitioners, school leaders, senior inspectors, local and national policymakers – and probing in greater depth the distinctive situations in each of the four jurisdictions that make up the UK. From these investigations we offer a vision, some guiding principles and four sets of clearly targeted recommendations, each set to be applied in a particular jurisdiction. We also offer some observations about comparative and UK-wide activity.

In so doing we have moved from an emphasis on evidence in the interim report to a focus on action in this document. This is, of course, the essence of what we are saying educational professionals in the UK need to be able – and must be *enabled* – to do, whatever the national setting they work in and whatever the educational challenges and statutory frameworks they are required to address.

**Professor John Furlong**

*University of Oxford*

*Chair of the Steering Group*

*BERA-RSA Inquiry into Research and Teacher Education*

MAY 2014

# EXECUTIVE SUMMARY

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## 1. Introduction and context

This final report of the BERA-RSA Inquiry into the Role of Research in Teacher Education makes the case for the development, across the UK, of self-improving education systems in which teachers are research literate and have opportunities for engagement in research and enquiry. This requires that schools and colleges become research-rich environments in which to work. It also requires that teacher researchers and the wider research community work in partnership, rather than in separate and sometimes competing universes. Finally, it demands an end to the false dichotomy between HE and school-based approaches to initial teacher education.

The Inquiry brings a broad and inclusive definition to the term “research” (see Appendix 2). Overall, it has identified four main ways in which research can make a contribution to teacher education:

- First, the content of teacher education programmes may be informed by research-based knowledge and scholarship, emanating from a range of academic disciplines and epistemological traditions.
- Second, research can be used to inform the design and structure of teacher education programmes.
- Third, teachers and teacher educators can be equipped to engage *with* and be discerning consumers *of* research.
- Fourth, teachers and teacher educators may be equipped to conduct their own research, individually and collectively, to investigate the impact of particular interventions or to explore the positive and negative effects of educational practice.

In addition to this broad approach to research, the report’s recommendations relate to a range of teaching phases and contexts: early years through to further education; schools, colleges and specialist providers; mainstream, special and alternative

education. Its definition of “teacher education” is also inclusive: it spans initial teacher education programmes, however and wherever these are delivered, and programmes to support teachers’ continuing professional development and progression to leadership.

The evidence gathered by the Inquiry is clear about the positive impact that a research literate and research engaged profession is likely to have on learner outcomes. It is also clear that the expectation that teachers might ordinarily engage *with*, and where appropriate, *in* research and enquiry need not, and *must* not, become a burden on a profession that sometimes struggles with the weight of the various demands rightly or wrongly placed upon it.

Rather, this is about empowering teachers, school and college leaders, and all who work with them, to better understand how they might enhance *their* practice and increase *their* impact in the classroom and beyond. In short, it is about developing the capacity of teachers, schools and colleges, and education systems as a whole to self-evaluate and self-improve, through an ongoing process of professional reflection and enquiry.

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## 2. Evidence

The Inquiry draws on a substantial domestic and international evidence base, outlined in an earlier interim report and further explored in this document. This includes: the findings drawn from a set of seven commissioned papers produced by leading experts in the fields of teacher education and educational research, in the UK and internationally, listed in Appendix 4; evidence arising from an open call for submissions which generated thirty-two written responses; and outcomes from a range of meetings with leading individuals and organisations from across the UK. In addition the Inquiry benefited from feedback from a Reference Group, which included representatives from many of the leading educational organisations in the UK, and from a set of Special Advisers, both detailed in Appendix 1.

This evidence confirms that:

- 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* enquiry-oriented 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.



### 3. Vision and principles

These findings lead to a **vision** and set of **principles** for developing a *research-rich self-improving* educational system. The principles are as follows:

#### Teaching and learning

In a research-rich, self-improving education system:

- Every learner is entitled to teaching that is informed by the latest relevant research.
- Every teacher is entitled to work in a research-rich environment that supports the development of their research literacy, and offers access to facilities and resources (both on-site and online) that support sustained engagement with and in research.

#### Teachers' professional identity and practice

In a research-rich, self-improving education system:

- Teachers share a common responsibility for the continuous development of their research literacy. This informs all aspects of their professional practice and is written into initial and continuing teacher education programmes, standards, and in registration and licensing frameworks.
- During the course of qualifying and throughout their careers, teachers have multiple opportunities to engage in research and enquiry, collaborating with colleagues in other schools and colleges<sup>1</sup> and with members of the wider research community, based in universities<sup>2</sup> and elsewhere.

#### School and college leadership

In a research-rich, self-improving education system:

- Research literacy has a prominent place in development programmes for governors, for parents' organisations and for senior and middle leaders, such that the development of research-rich school and college environments is seen as a key leadership responsibility.
- The levers that hold schools and colleges – and other educational institutions and agencies – to account, notably inspection frameworks, explicitly recognise the importance of research literacy to teachers' professional identity and practice. They also see research literacy as an important prerequisite for school and college improvement and a research-rich culture as a key feature of any school or college designated 'outstanding'.

#### System-level responsibilities

In a research-rich, self-improving education system:

- Policymakers of all persuasions – and those who seek to influence policy – encourage, and are responsive to the findings of educational research, both in policy formulation and in implementation strategies.

<sup>1</sup> Here, the emergent networks of Teaching Schools in some UK jurisdictions offer an opportunity for collaborative and comparative research and for the dissemination of findings.

<sup>2</sup> 'Universities' does not just refer to departments, schools and institutes of education, but to the wider university – the intention is to foster a research-rich culture that enables, for instance, practitioners and practitioner networks (such as those provided by subject associations) to enhance their subject knowledge through partnerships with the relevant specialist departments and research units.

- There is a sustained and growing systemic capacity to support educational research at the level of the individual school or college, through local and regional networks, embedded in teachers' terms and conditions and across the wider research community, based in universities and elsewhere.

#### Research production

In a research-rich, self-improving education system:

- Commissioners of education research build teacher engagement into commissioning processes, so that wherever possible teachers are active agents in research, rather than passive participants.
- Producers of new research knowledge, including universities, teaching school alliances, academy chains and local authorities, as well as individual schools, endeavour to make their research findings as freely available, accessible and usable as possible.

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## 4. Recommendations

In building a research-rich culture, practitioners and policymakers in England, Scotland, Wales and Northern Ireland face different challenges and begin from different starting points. For this reason, the Inquiry's recommendations are jurisdiction-specific. These cover a range of issues, including: initial teacher education; continuing professional development; research leadership and capacity; practitioner engagement.

With regard to both initial teacher education and teachers' continuing professional development, there are pockets of excellent practice across the UK but good practice is inconsistent and insufficiently shared. Drawing on the evidence, the Inquiry concludes that amongst policymakers and practitioners there is considerable potential for greater dialogue than currently takes place, as there is between teachers, teacher-researchers and the wider research community.

It also concludes that everybody in a leadership position – in the policy community, in university departments of education, at school or college level or in key agencies within the educational infrastructure – has a responsibility to support the creation of the sort of research-rich organisational cultures in which these outcomes, for both learners *and* teachers, can be achieved.

## 1

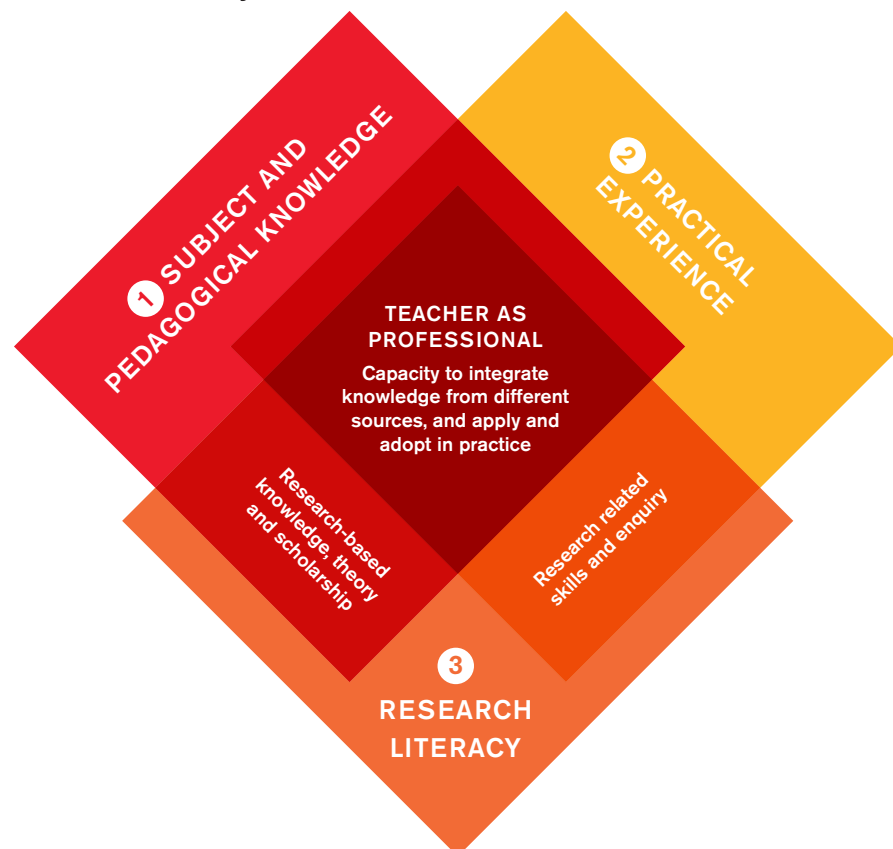
# INTRODUCTION AND CONTEXT

Many of those who engaged with the BERA-RSA Inquiry into Research and Teacher Education share the concern of policymakers of all persuasions about the underachievement of too many learners across the UK's education systems.

They share the aspiration to 'close the gap' in achievement which leaves so many young people, particularly those at the margins of society, with poor life chances. They are also concerned about the pressures that impact on teachers' capacity to be creative, to innovate, to enquire.

Against this background, this final report draws on the evidence collated during the Inquiry to make the case for developing and sustaining what might be termed teachers' 'research literacy'.<sup>3</sup> Research literacy is viewed as a key dimension of teachers' broader professional identity, one that reinforces other pillars of teacher quality: notably subject knowledge and classroom practice (see Fig. 1).

**Figure 1: Dimensions of teacher effectiveness and teachers' professional identity**



<sup>3</sup> 'Research literacy' is one of a number of terms used in this report that has a specific meaning in this context; we define this term and others in Appendix 2.

As outlined in Appendix 2, the Inquiry has taken a deliberately wide-ranging and *inclusive* definition of research, one that embraces the kind of enquiry-based learning and reflective professional practice that many school and college leaders and teachers will be familiar with in their own practices, but that also includes a range of other forms of research, including large-scale and longitudinal studies of learning and teaching, that may be undertaken by full-time researchers.

The Inquiry has taken a similarly broad definition of teacher education, one that includes programmes of initial teacher education, wherever or however they are delivered, and programmes and mechanisms that support teachers' continuing professional development and their progression into leadership roles.

Overall, the Inquiry has identified four main ways in which research can make a contribution to teacher education:

- First, the content of teacher education programmes may be informed by research-based knowledge and scholarship, emanating from a range of academic disciplines and epistemological traditions.
- Second, research can be used to inform the design and structure of teacher education programmes.
- Third, teachers and teacher educators can be equipped to engage *with* and be discerning consumers *of* research.
- Fourth, teachers and teacher educators may be equipped to conduct their own research, individually and collectively, to investigate the impact of particular interventions or to explore the positive and negative effects of educational practice.

In an environment in which teachers (and parents) are bombarded with assertions about “what is good for children” and other learners, high quality educational research and enquiry has a key role to play. It can enable practitioners to distinguish myth from reality and help identify strategies that have the best chance of success in the contexts in which they work. Research provides a rich source of evidence for teachers, school leaders, teacher educators and policymakers. It also provides opportunities for engaging teachers in enquiry-based practice, for inspiring innovation, and for building strong, sustainable relationships between teachers and educational leaders in different schools and colleges, and between them and the wider research community.

In this context, many of those who contributed to the Inquiry are deeply concerned by the emergence of an environment, often narrowly data-driven, that appears to militate against teachers' engagement in more open forms of research and enquiry. The findings are clear: in the UK and elsewhere, teachers' research literacy and opportunities for engagement in the research process correlate closely with the quality of teaching and, through this, with student outcomes.

For this reason, schools and colleges need to be research-rich environments that promote and enhance teachers' research literacy and that open up opportunities for teacher engagement in the research and enquiry process. This requires that, as one Scottish respondent to the Inquiry put it, “teachers have the time and support to enable their effective engagement with (and in) research”.

This, in turn, requires a positive reappraisal of the part that universities play in developing teacher knowledge and teaching practice in initial teacher education (ITE) and for a more systematic approach to teachers' continuing professional development (CPD). Here, policymakers in England, Wales and Northern Ireland have much

to learn from their colleagues in Scotland, where the Donaldson Review has recommended the strengthening of the relationship between teachers and the professional research community. Again, domestically and internationally, the evidence is clear: structured, accredited CPD informed by the latest research knowledge can play an important role in improving the quality of teaching.

However, in many settings, teachers' experience of CPD is fragmented, occasional and insufficiently informed by research in all its different forms. Addressing this reality should be a priority for policymakers. Colleagues in Northern Ireland, for instance, spoke about "the problem being with CPD, where there is no apparent national strategy and no follow-through from initial teacher education".

Higher Education and the broader professional research community have an important role to play in the development of research-rich cultures in schools and colleges. Universities – especially but not only their departments of education – need to maintain the capacity and personnel to support teachers and school and college leaders involved in research and enquiry 'on the ground'.

The need for this support is vital because of the well-documented pressures that teachers and school and college leaders operate under. While it is an assumption of many contributors to the Inquiry that teachers *should* and *want* to remain up to date with the latest developments in their subject and in practice and theory more broadly, the suggestion is not that *every* teacher should be *required* to be actively and

continuously involved in *doing* research, whatever the benefits of this might be; the existing workload and performance pressures with which teachers cope preclude this.

Instead, the contention is that *every* teacher should have the confidence, ability and capability to engage in research and enquiry

activities *when the opportunity or need arises*, and that schools and colleges should provide the kind of research-rich environment in which teachers' research literacy is supported and sustained, and where opportunities for research engagement *ordinarily* and periodically arise.

Moreover, policymakers should recognise the potential of initial teacher education for the development of teachers' research and enquiry skills and predispositions, and the broader role of such skills and dispositions in renewing teachers' professional identity and practice through well-planned and accessible programmes that support teachers' professional development.

This final report explains why self-improving education systems require a teaching force that is research informed and research inquisitive, and why this will only be achieved if we can create a *research-rich* culture in our schools and colleges.

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*I'd not done this kind of research before and I think I'd underestimated the power it had for helping me learn about teaching and being able to identify things that work*

*Teacher (Secondary)*<sup>4</sup>

<sup>4</sup> The comments from practitioners cited in the document are drawn from the seventh of these papers, which focuses on teachers' experiences of being involved in research and enquiry.

# 2

# EVIDENCE

The bulk of the evidence gathered in the course of this Inquiry was presented in an interim report, *The Role of Research in Teacher Education: Reviewing the Evidence*, published in January 2014.

The methodology used to gather the Inquiry's evidence is set out in detail in Appendix 3; in brief, it involved five strands of activity:

- The commissioning of a set of seven papers to review the international evidence on key issues; each paper is produced by leading experts from the UK and internationally.
- An open call for submissions which generated thirty-two written responses.
- A series of open and invitational sessions held at various relevant conferences and at the RSA.
- Meetings and discussion sessions with leading individuals and organisations active in areas of professional practice pertinent to the Inquiry in England, Scotland, Wales and Northern Ireland.
- Feedback from a Reference Group, that includes representatives from many of the leading educational organisations in the UK, and from a set of Special Advisers, both detailed in Appendix 1.

While all of these different forms of activities have informed our thinking, below we summarize our main evidence from the seven research papers.

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**Paper 1: UK policy and practice: the role of research in teacher education** (Beauchamp, Clarke, Hulme and Murray, 2014)

Paper 1 reviews current policy and provision for teacher education across the four home nations of the United Kingdom. The analysis highlights the increasing divergence in entry routes and policy discourse across the UK, as well as in the framework of standards and competencies which have recently been revised in each nation. Whereas all initial teacher education in Scotland and Northern Ireland is led by higher education institutions, and provision in Wales is primarily university-led with a small component of employment-based provision, the range of approaches in England is great, with multiple providers and entry routes encompassing university-led, school-centred and employment-based programmes, and is set to diversify still further as a result of ongoing reforms.

In line with these contrasting trends, the policy discourse around teaching and the position of research in teacher education across the UK is similarly variable. In Northern Ireland, as in Scotland, there is clear recognition of teaching as a complex profession, together with a strong emphasis on critical reflection and active engagement in research for teachers across each phase of professional development. The situation in Wales is more ambiguous: research features prominently in non-statutory guidance for teachers and inspection guidance for ITE providers, though there is no



explicit reference to the use of research in the revised teacher standards. In England, the nature of teaching is contested, while the value of research in teacher education has arguably diminished over time. In addition, critics of the recent reforms to initial teacher education have expressed serious concerns that the shift away from university-led programmes will diminish research capacity, by destabilising staffing and eroding funding for applied research. As yet, the full implications of the changes in provision for ITE are not clear, highlighting the need for further monitoring of developments to ensure high quality provision is achieved through all training routes.

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**Paper 2: *International overview: the contribution of research to high-performing systems* (Tatto, 2014)**

From an international perspective, Paper 2 considers the role of research in four contrasting examples of education systems: Chile, the USA, Singapore and Finland, representing 'fair', 'good', 'great' and 'excellent' school performance as classified by McKinsey (2010).<sup>5</sup> For each country, Tatto examines the nature and organisation of teacher education and provides an overview of entry and qualifying requirements and quality assurance, before drawing out the contribution of research to each system. As comparative analysis shows, education systems such as Singapore and Finland that consistently 'come out on top' develop capacity from the bottom up, and rely heavily on methodologically rigorous research-based knowledge to inform their practice. What is striking about provision in both Finland and Singapore, as compared to the more diverse, fragmented and market-oriented provision in the USA and Chile, is the extent to which teachers' engagement with research and enquiry-oriented practice is embedded throughout the education system. Nevertheless, it is important to stress that a causal connection between specific features of the training programme (including the research components) and the success of the education system can only be inferred rather than directly proven. Indeed the Finnish Ministry for Education has called for research knowledge on teacher education to be strengthened through a better, more highly coordinated national research programme.

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**Paper 3: *Philosophical reflections on the contribution of research to teacher education* (Winch, Orchard and Oancea, 2014)**

Some of the key philosophical issues arising in the role of research in teachers' professional learning and development are examined in Paper 3. The authors highlight three interconnected and complementary aspects of teachers' professional knowledge: practical wisdom, technical knowledge and critical reflection. Arguing against simply relying on common sense or 'what works' protocols, they show how research can make a positive contribution to each aspect of teachers' professional knowledge. The authors further distinguish between a simplified 'craft' view of teaching and a narrow technical view, elements of which are discernible in current policy debates in the UK context.

What is missing from these conceptions, they argue, is the capacity for critical reflection, i.e. the type of deeper insight and understanding that comes from interrogating one's practice based on the wider research evidence and making explicit

<sup>5</sup> McKinsey (2010) 'How the world's best performing school systems come out on top' by Mona Mourshed, Chinezi Chijioke, and Michael Barber (<http://mckinseysociety.com/how-the-worlds-most-improved-school-systems-keep-getting-better/>).

the assumptions and values that underpin it. In contrast to any narrow or simplified view, the idea of the teacher as *professional* combines all three aspects of knowledge – practical, technical and theoretical – including knowledge derived through personal experience as well as research, analysis and critical reflection. Importantly, they suggest that research can play a complementary role in relation to each of these dimensions: for example, engaging in or with research can inform and enhance teachers' technical knowledge about particular instructional techniques, as well as equipping them for the rich reflection required in practical deliberation and professional judgment. At the same time, research itself can be enriched, through greater insight into the challenges and complexities of educational practice.

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**Paper 4: *Integrated ITE programmes based on 'research informed clinical practice'* (Burn and Mutton, 2014)**

Paper 4 examines a small number of highly innovative and influential initial teacher education programmes, based in part on a medical model of 'clinical practice', which seek to integrate practical engagement in schools with research-based knowledge in carefully planned and sequenced ways. As Burn and Mutton articulate it, "for beginning teachers working within an established community of practice, with access to the practical wisdom of experts, 'clinical practice' allows them to engage in a process of enquiry: seeking to interpret and make sense of the specific needs of particular students, to formulate and implement particular pedagogical actions and to evaluate the outcomes". Importantly, by making explicit the reasoning and underlying assumptions of experienced teachers, student teachers are encouraged to develop and extend their own decision-making capacities or professional judgments.

The evidence review for this paper focuses on established programmes in the UK and the USA, notably the Oxford Internship scheme in England and the US Professional Development Schools and Teachers for a New Era (TNE), as well as more recent developments led by the Universities of Glasgow and Aberdeen in Scotland and in Melbourne, Australia. In addition, the authors review the evidence on system-wide approaches in the Netherlands and Finland which are also informed by the principles of clinical practice.

While some contributors to the Inquiry questioned the merit of a mode of professional development and practice originally developed in and for a non-educational setting, Burn and Mutton are able to demonstrate the impact of such approaches. There is for example evidence that clinical preparation has a positive effect on beginning teachers' learning and confidence, while graduates of such programmes appear to be better prepared for their first teaching post. Crucially, however, it is the *quality* of the clinical experience that matters. Simply extending the amount of time spent by trainee teachers in the classroom is not associated with improved outcomes.

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**Paper 5: *The contribution of research to teachers' continuing professional development* (Cordingley, 2014)**

Moving from initial teacher education to continuing professional development Paper 5 examines the key ways in which teachers engage in and with research as part of effective provision for CPD. Drawing together the findings from multiple systematic reviews, the analysis highlights a clear and consistent set of findings about the characteristics of effective professional learning activities, including the use of specialist advisers and external experts to help identify effective strategies

and techniques. Also important is engagement in collaborative enquiry, structured observations and peer support, enhanced by the use of professional dialogue and reciprocal risk-taking, which gives teachers the chance to 'learn to learn from looking' and to explore why things do and don't work in different contexts. The contribution of research to CPD is potentially highly significant: the use of research-based knowledge, theoretical insights and involvement in research processes all feature strongly in the evidence about professional development and in the selection and use of tools to aid teachers' learning. As emphasized by Cordingley, enquiry-oriented leadership is crucial to create the conditions for enquiry-oriented teaching, which is associated with the greatest gains for pupils' learning and educational outcomes.

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**Paper 6: *Building collective capacity for improvement at a school and system level* (Mincu, 2014)**

Paper 6 investigates the contribution of research to improving teaching quality and hence enhancing learning outcomes for students. Drawing on the international research literature on teacher effectiveness and school improvement, Mincu makes three key arguments about the contribution of research: first, teachers make a difference and they make the most difference for lower-achieving students, who disproportionately come from deprived backgrounds; second, teachers and school leaders are at the heart of school and system improvement, particularly when supported by specialist support from both inside and outside the school; and third, research has come centre stage as a pillar of school improvement. Practitioner engagement in and with research has been shown to contribute to successful school improvement in a variety of ways: through the sharing of information about effective practice; by involving practitioners in the testing of new ideas and in the design, delivery and monitoring of interventions.

In Scotland, following the Donaldson review of teacher education, it is now government policy to develop a systematic and coherent approach to career-long professional learning in which universities have a prominent role. However, across the rest of the UK there appears to be a rather more fragmented and piecemeal approach to the use of research than displayed by high-performing systems such as Finland and Canada. Although there have been examples of promising large-scale interventions in parts of England, notably the London Challenge, replicating this success in all parts of the country will be highly problematic in the absence of a coordinated strategy, particularly when faced with more constrained resources in the current climate. Furthermore, as emphasized by respondents to the Inquiry's Call for Submissions, there are still barriers to overcome in each part of the UK when it comes to promoting practitioner engagement in research, particularly around lack of time, capacity and commitment due to heavy workloads and pressure to meet the demands of accountability. As Mincu's analysis highlights, one of the key tasks for policymakers in the UK is therefore to reappraise the balance between capacity-building activity, on the one hand, and accountability mechanisms, on the other, to ensure that the foundations are in place for a research-rich system at all levels.

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**Paper 7: *Teachers' views: perspectives on research engagement* (Leat, Lofthouse and Reid, 2014)**

Drawing on a range of projects and studies that have involved teachers in undertaking and/or making use of research, Paper 7 concludes that there is an important

distinction to be made between research as a body of knowledge, research as a professional learning process and research as a social practice.

When research is seen as a body of knowledge, teachers may or may not choose to make use of it in their practice. When research becomes a professional learning process, it can have a deep influence on how they understand research and may lead them directly towards more active engagement in undertaking enquiry themselves. This is the tradition set out more than forty years ago by Lawrence

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*It's really impacted on my career – at first I was just an ordinary classroom teacher not knowing much about the wider world of education and suddenly we are getting offers to go and disseminate thinking skills in LEAs and at TTA conferences and so on, and that's opened my eyes to see who else is involved in education ... what is going on*

*Teacher (Secondary)*

Stenhouse, often described as 'teacher as researcher'. As one teacher cited in the paper reports: "I'd not done this kind of research before and I think I'd underestimated the power it had for helping me learn about teaching and being able to identify things that work."

But such engagement is not always such a positive experience. Leat et al. find that individual teacher research engagement can be experienced quite negatively if there is little explicit support for it within the school. Leadership support is found to be especially important. In addition,

the pressures created by a target- and results-oriented culture, so prevalent in schools now, was found in some cases to stifle creativity – with research being seen as some kind of 'add-on' or luxury. The authors also report that when some teachers become more research active, it may create some tensions among the collective staff of a school. Research, as well as generating important insights, may also generate real or apparent criticism of current policies and practices. However, for those teachers who have engaged successfully with and in research, there is little doubt that the curriculum and pedagogic innovation and change that have followed has been very powerful. As the authors conclude, "engagement in and with research can be a very positive experience for teachers. Broadly speaking it improves their working lives, gives them new perspectives and makes them more sensitive to students' experiences of classrooms."

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## Overall

There is strong evidence that teachers and teacher educators need to engage *with* research, in the sense of keeping up to date with the latest developments in their academic subject and on effective instructional techniques to inform their pedagogical content knowledge. There is also strong evidence that teachers and teacher educators need to be equipped to engage *in* enquiry-oriented practice, which means having the capacity, motivation and opportunity to use research related skills to investigate what is working well and what isn't fully effective in their own practice. *High-performing education systems demonstrate that this type of enquiry-oriented, research-rich practice needs to be strategically embedded in schools, colleges and universities and with policymakers.*

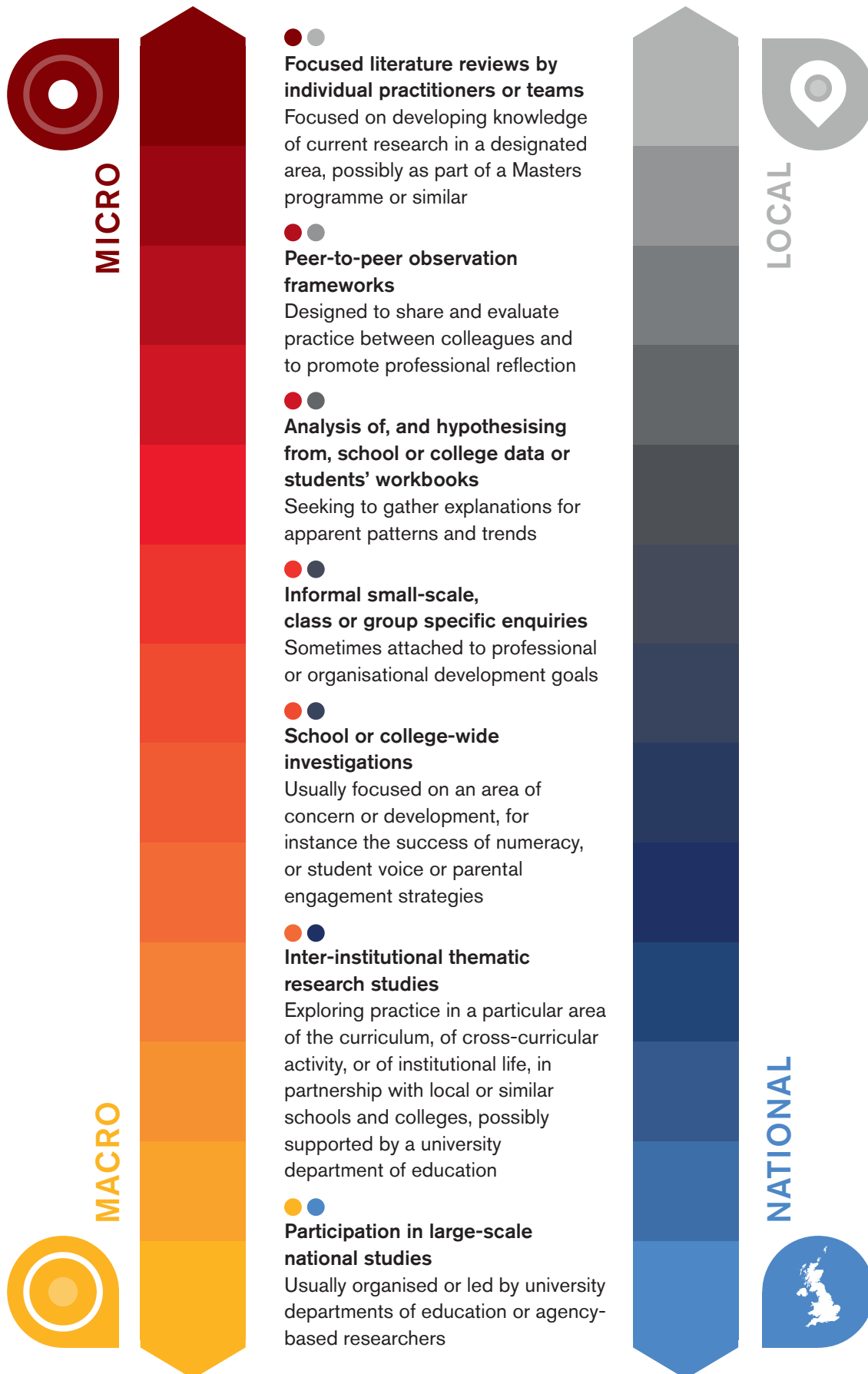
Evidence also reveals the benefits of *clinical* preparation, through carefully designed programmes of initial teacher education, which allow trainee teachers to

integrate knowledge from academic study and research with practical experience in the school and classroom. Clinical practice is one approach to initial teacher education which brings research and practice together. It is not the only one. However, whatever approach is used this focus on research and enquiry needs to be sustained throughout teachers' professional careers, so that disciplined innovation and collaborative enquiry are embedded within the professional culture and become the established way of teaching and learning in every school and college.

Students are likely to be the key beneficiaries of such a transformation (see Fig. 2): UK-wide and internationally, the evidence confirms that the most effective teachers utilise the lessons from – and the techniques of – educational research in their day-to-day work. These teachers are research literate and research confident. They maintain strong relationships with other teachers, in their own schools and colleges and elsewhere, and with researchers in universities and in other settings. It is in this context that they are able to continually update their practice and renew their professionalism. Teachers who display this kind of research literacy have the capacity to secure stronger outcomes for the learners in their care and, with the support of school leaders, to play an important part in school and college improvement initiatives.

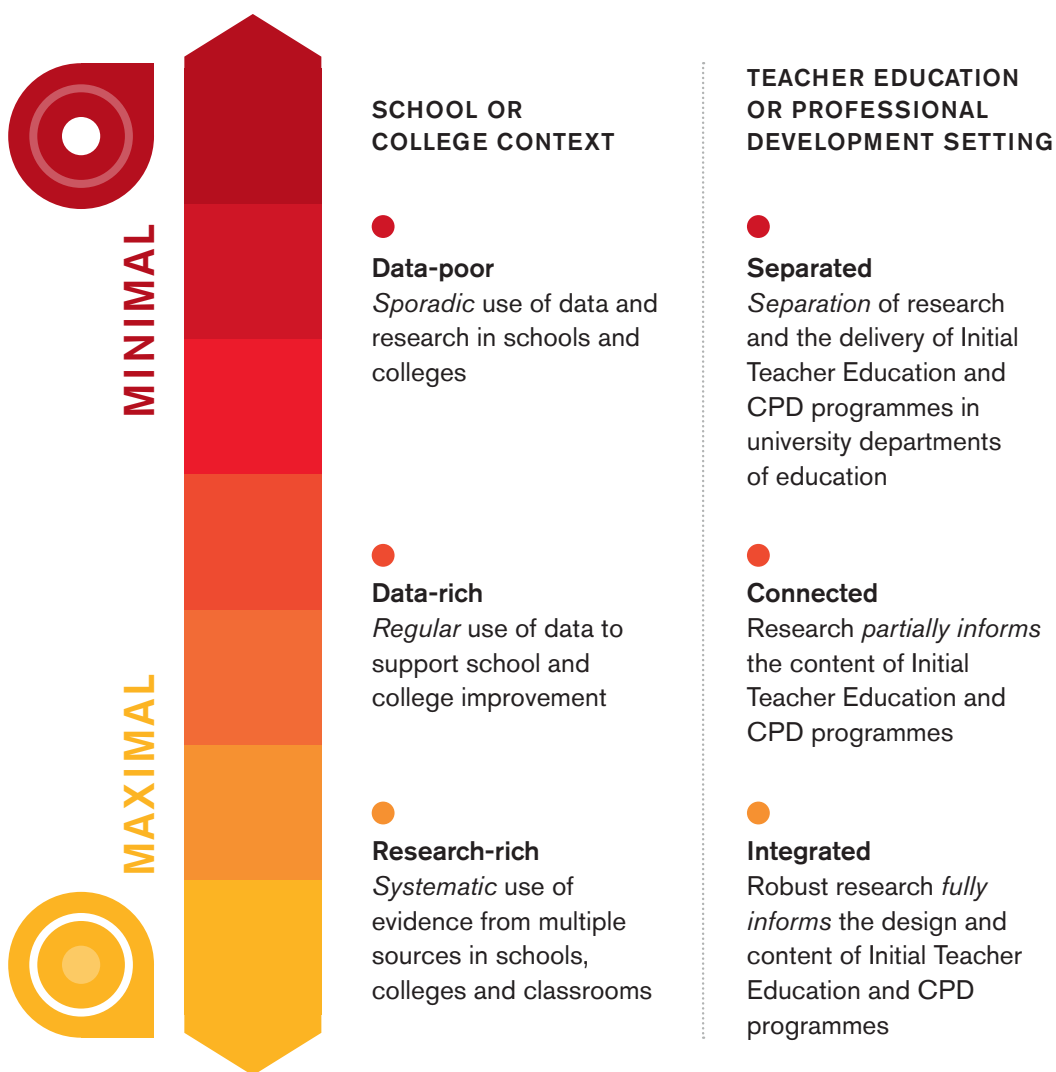
For this reason, it is argued that research literacy *and* research engagement ought to play a prominent part in teachers' initial and continuing education programmes for practitioners in early years, primary, secondary and further education across the UK. It should also inform any future reviews of teacher standards and teacher competencies and any regulatory frameworks underpinning them.

Figure 2: Types of research engagement



As has already been noted, those contributing to the Inquiry were conscious of the various pressures and constraints that teachers and school and college leaders work under and were adamant that research and enquiry should not become an additional burden with which practitioners are required to cope. Rather, the need is to encourage a culture in which, *over time*, engagement *in* and *with* research becomes an everyday part of teachers' professional identity and practice. Such engagement might be framed as ranging from 'maximal' to 'minimal' (see Fig. 3).

**Figure 3: From 'minimal' to 'maximal' research engagement – a continuum**



Finally, while the evidence suggests that this will bring positive outcomes in terms of student and school and college 'performance', there are other benefits for teachers and learners, and for the schools and colleges that they work in. A research literate, research engaged profession is likely to be one that is more self-confident, creative and adventurous – those qualities that it is often claimed have been stripped away from teachers' identity and practice in recent decades.

3

# VISION AND PRINCIPLES



The vision that emerges from the Inquiry is of *research-rich, self-improving* education systems across the UK, systems in which evidence informs practice and policy, and in which teachers and the wider educational research and policy communities work *together* to deliver the best outcomes for learners.

If such a vision is to be realised, teachers and middle and senior leaders will need to feel able, equipped and confident to engage *in* and *with* research and enquiry. At a practical level they will need to work in school and college environments that value this engagement and take steps to actively encourage it. And system-wide schools, colleges and universities will need to act in collaboration and partnership: pooling knowledge and expertise, sharing outcomes and informing developments in policy and practice (see Fig. 4).

Digital technologies and social media are opening up new possibilities for those involved in research and enquiry. These possibilities – in terms of collaboration, data access and methodology – can only strengthen the creation of the system-wide research-rich culture that is required. Teachers are increasingly adept at using these technologies creatively and effectively in enquiry-based practice. The emergence of Big Data, digital assessment and Massive Open Online Courses (MOOCs) offer further possibilities for the *normal* and *career long* engagement of teachers and teacher educators in such a culture.

**Figure 4: A research-rich culture that is connected and collaborative**

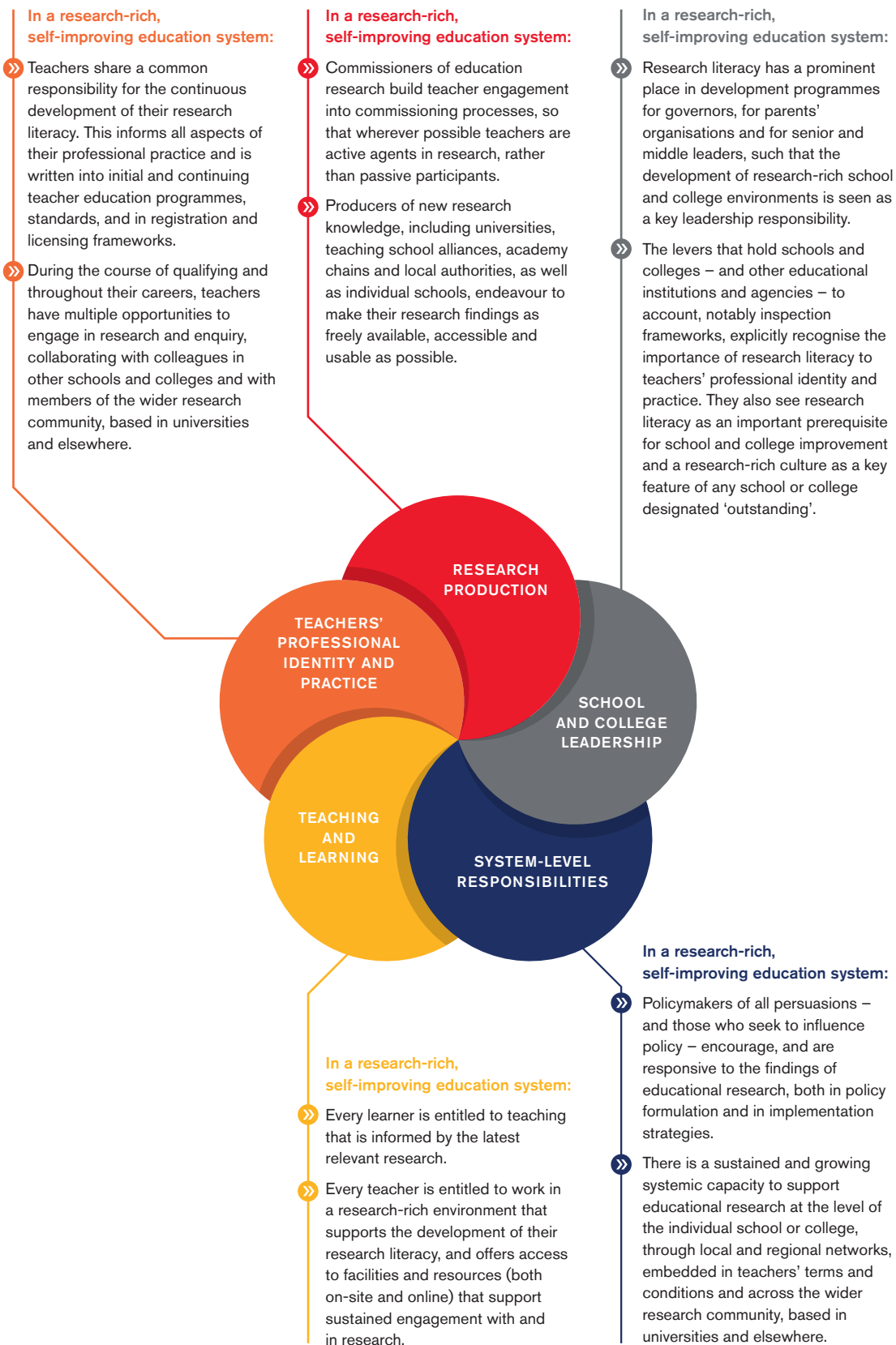


Partly as a result of these technologies, *all* teachers and school and college leaders now have much greater access to data than was the case only a decade or so ago, and they have new opportunities to connect and collaborate. However, while many teachers are now much better at working with data, they typically do so from an institution-specific, rather than system-wide, perspective. Further, while this new confidence with data is to be welcomed, it is only one pillar of a broader research-rich culture.

Evidence gathered in the course of the Inquiry underlines the need to go much further, to progress from being *data-driven* to being *research-rich* and from being *isolationist* to being *collaborative*. This requires a much stronger relationship between schools and colleges, and between practitioners in schools and colleges and those in the wider research community.

Against this background, the Inquiry has identified ten principles, organised across five themes that characterise the design of research-rich, self-improving education systems (see Fig. 5). These principles can be used as criteria against which to assess policy proposals for teaching and for teachers' initial and continuing education. They also underpin the Inquiry's recommendations, which follow in section 4.

**Figure 5: Principles for self-improving and research-rich education systems**



# 4

# RECOMMENDATIONS

At a UK level, the Inquiry has stressed that the development of a research-rich culture is vital if schools and colleges are to develop and sustain the capacity for self-improvement.

To this end, the full range of agencies involved in education throughout the UK – statutory bodies, teaching unions, professional and subject associations, local authorities and academy chains – need to exercise leadership amongst their members and partners in promoting the use of evidence, enquiry and evaluation to prioritise the role of research and to make time and resources available for research engagement.

Universities at their most senior levels as well as departments and faculties of Education need to recognise that they have a key strategic role to play in the development and support of a high quality education system throughout the UK. Part of their responsibility must be in the nurturing of research that is directly relevant to the educational system. While the ‘open access’ policy in research publication is a step in the right direction, further work needs to be undertaken in each of the four jurisdictions to ensure that relevant high quality research is easily accessible to all practitioners and policymakers.

At present, across the UK, there are differences in policy emphasis and examples of excellent practice. Thus, the Inquiry makes its recommendations from a jurisdiction-specific perspective and these are set out below. These are underpinned by the evidence gathered in the course of the Inquiry and informed by the range of specific challenges and opportunities that were identified in the course of discussions between members of the Steering Group and colleagues based in each jurisdiction.



## England

A period of rapid change is underway in the English school system. Recent innovations have included:

- The conversion of thousands of schools to Academy status and the opening of a number of Free Schools.
- The emergence of a growing number of Academy chains and school federations.
- The designation of several hundred 'Teaching Schools', with particular responsibilities in relation to teacher education, research and other matters.
- The introduction of the Pupil Premium and other strategies designed to 'close the gap' between advantaged and disadvantaged students.
- A series of new arrangements in terms of assessment, curriculum and accountability.
- The creation of the Education Endowment Foundation, one of whose objectives is to "Encourage schools, government, charities, and others to apply evidence and adopt innovations found to be effective".

In principle, a more devolved and autonomous system gives school leaders greater scope to use evidence to inform their decisions. There are also signs of an emerging infrastructure for research engagement, notably through the recently established network of Teaching School Alliances. Some aspects of the work being undertaken under the auspices of the Education Endowment Foundation also encourage teachers' active engagement with research.

In practice, however, despite renewed emphasis on 'evidence-based' teaching and promoting 'what works', there are still significant barriers to teachers' engagement in and with research. The first evaluation report of teaching schools by the National College for Teaching and Leadership<sup>6</sup> reported that some Teaching School Alliances have struggled to give Research and Development the attention it deserves due to insufficient resources and the pressure of competing priorities. Practitioners are especially concerned by the instability and uncertainty of a more fragmented system and the upheaval caused by imminent reforms to the examination system and the National Curriculum. The position of research appears even more precarious as a result of changes to initial teacher education in England, which have destabilised staffing in many university departments of education and diminished funding streams for applied research.

In this context, there is an urgent need for leadership to build and protect research capacity and embed a stronger infrastructure for research engagement. In particular, the Inquiry recommends that, in England:

<sup>6</sup> National College for Teaching and Leadership (2014) *The teaching schools evaluation: Emerging issues from the early development of case study teaching school alliances* London: DfE.

» **Research leadership**

The National College needs to work with the emerging Teaching Schools movement to establish a National Network of Research Leaders in Education (RLE), designed to accredit experienced research leaders with existing expertise, whilst providing ongoing support and professional development opportunities to encourage other practitioners to develop their capacity and responsibility in this area. The membership of this network should span the full professional community, including teachers, school and college leaders, university-based researchers, and professionals from other research organisations.

» **Teachers' standards**

The Department for Education needs to revise the existing teachers' standards so as to make research literacy an explicit criterion for gaining qualified teacher status and progressing to middle or senior leadership roles in schools and colleges.

» **Headteacher standards**

The recently announced Headteacher standards review<sup>7</sup> should aim to prioritise both the development of research literate school leaders, and the leadership of a research-rich culture in all schools and colleges.

» **The inspection framework**

Ofsted needs to revise the inspection framework for initial teacher education, and for schools and colleges, such that enabling teachers – and future teachers – to engage with research and enquiry becomes one of the hallmarks of 'outstanding' practice. As an initial step, Ofsted should undertake a thematic review to identify and disseminate best practice in the use of research and enquiry to promote school and college improvement and teachers' professional development.

» **Initial teacher education**

The Department for Education needs to commit to publishing a review of the medium and long-term impact of its teacher education policies on university departments and address any unintended consequences for teachers' research literacy that are identified. It is possible that some aspects of this will be picked up through the Review of Initial Teacher Training Courses announced by the Secretary of State on 1 May (DfE Press release 032/2014). The University Council for the Education of Teachers (UCET) needs to work with its members and partners to review the quality of current provision, ensuring that this is informed by robust research. UCET and its partners should produce a sector-wide plan to strengthen research informed practice wherever this is required.

<sup>7</sup> Department for Education (2014) *Press Release: Headteachers Standards Review* [www.gov.uk/government/news/headteacher-standards-review](http://www.gov.uk/government/news/headteacher-standards-review).



## Scotland

In Scotland, the Donaldson Review has established the policy framework to meet many of the aspirations for a research informed, research literate and research engaged teaching profession.

However, there is often a gap between the aspirations of policy and the reality of practice. Moreover, at a time of extensive change to curriculum and assessment arrangements, secondary school teachers in particular may not regard the implementation of the Donaldson recommendations on professional learning as an urgent priority. Nevertheless structures have been put in place to promote delivery of the recommendations.

The National Partnership Group (NPG) set up in the immediate aftermath of the Review reported in November 2012 came up with a list of proposals as to how to take forward the recommendations. One of these was to establish an Implementation Board that has strategic oversight of the number of tasks that have to be completed, together with an impressive timescale. The aspirations for the NPG are set out online: [www.scotland.gov.uk/Resource/0040/00407756.pdf](http://www.scotland.gov.uk/Resource/0040/00407756.pdf).

Thus, teacher education in Scotland is not short of recommendations for development. There are 50 from Donaldson and 20 from the NPG. Some recommendations are already well advanced such as the re-design of Bachelor of Education degree programmes, the new Standard for Professional Updating and the establishment of a National College of School Leadership. Others will inevitably take time to implement and become part of the everyday practice of teachers. Clearly, teachers themselves need to be represented nationally and locally in decision-making about implementation and ways need to be found to enable them to take ownership of decisions which directly affect them.

In this context, the challenge in Scotland, following Donaldson, is threefold:

- To ensure that practitioner enquiry becomes an intrinsic part of professional and school development, not another 'add-on'.
- To use creatively the Scottish government's commitment to funding the development of partnership working between schools and colleges and the university sector.
- To build on the existing appetite for giving research and enquiry an important role in school improvement planning.

Against this background, the Inquiry recommends that, in Scotland:



**» Practitioner engagement**

The Scottish government, its partner agencies and teachers' representative bodies need to work together to find ways to ensure that teachers and school and college leaders are actively involved in the process of implementing and bringing to life the recommendations of the Donaldson Review. This is especially important at a time when other reforms, notably to the curriculum and to assessment, also require their attention.

**» Collaborative practice**

The Scottish government needs to prioritise funding for partnership proposals among schools, colleges, local authorities and universities that are focused on developing teachers' research literacy and their career-long research engagement. The funding criteria should contain strong messages about developing partnerships that are sustainable in the longer term.

**» Continuing professional development**

Local authorities need to make teachers' professional learning part of their leadership development programmes, with the development of research literacy and research engagement becoming a key feature of teachers' professional development and review.

**» Sharing practice and outcomes**

Local authorities need to play a key role in disseminating best practice and, to this end, should organize at least one dissemination event a year, focused on sharing examples of enquiry-based learning and research-rich practice, as part of their professional learning provision. The General Teaching Council for Scotland, in collaboration with other stakeholders, should stage a similar national event to support country-wide dissemination.

**» Quality assurance and accountability systems**

All relevant agencies need to ensure that national and local systems for quality assurance and accountability are agile and flexible so that they are able to respond to innovation and to opportunities for collaboration.



## Wales

Examination results and PISA scores are significantly lower in Wales than in other UK jurisdictions and the Inquiry recognises that addressing this is the immediate priority for practitioners and policymakers.

The extent of the challenge involved is outlined in a recent OECD report.<sup>8</sup> Its recommendations include the need to develop a stronger research culture in Wales that is linked to initial teacher education and continuing professional development.

At present research capacity and the contribution of research to all forms of teacher education in Wales is weak. There are some welcome initiatives to build capacity through the HEFCW funded WISERD programme based at Cardiff University but much more needs to be done at an institutional level to re-build the educational research capacity that has been lost in Wales over the last ten years.

The launch of the regional education consortia provides a new context in which to develop a collaborative and research-rich culture across schools, colleges and universities. This would enable school and college leaders and their colleagues in the professional research community to work more effectively together.

Against this background, the Inquiry recommends that, in Wales:

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*Engagement in and with research can be a very positive experience for teachers. Broadly speaking, it improves their working lives, gives them new perspectives and makes them more sensitive to students' experiences of classrooms*

*Evidence presented to the Inquiry*

<sup>8</sup> *Improving Schools in Wales: An OECD Perspective* (OECD, 2014) was published as this Final report goes to press and outlines the extent of the challenge facing educational practitioners and policymakers in Wales.

**» School improvement**

The Welsh government needs to reinforce the message that the development of a research-rich culture is an expectation for all good schools and for all schools aspiring to improve.

**» Research capacity**

University leaders as well as university departments and faculties of education need to recognise that they have a key role to play in the building of a high quality education service in Wales; part of their contribution must be in the nurturing of research capacity that is directly relevant to the needs of schools and colleges. There is a particular need to develop research capacity that is relevant to the Welsh medium sector. This is a specific capacity issue that needs to be addressed by the Welsh government itself.

**» Initial teacher education**

University departments and faculties of education need to work collaboratively with the new regional education consortia and schools and colleges to further strengthen their capacity to engage in research informed initial teacher education. The Welsh schools' inspectorate, Estyn, needs to reinforce the message that taking part in initial teacher education is an expectation of all good schools and all schools aspiring to be good.

**» Continuing professional development**

The Welsh government and the new regional education consortia, under the leadership of the General Teaching Council for Wales, need to develop more effective links between the current excellent provision for early professional development (the Masters in Educational Practice) and other forms of CPD such that provision is genuinely progressive and career long. In parallel, Estyn needs to revise the school inspection framework to take into account what steps schools are taking to support the professional development of their workforces as they strive to become self-improving institutions based on professional research and enquiry.

**» Teachers' standards**

The General Teaching Council for Wales needs to lead a review of the professional standards for educational practitioners in Wales, including the standards for Qualified Teacher Status, revising these to ensure that they embody research and enquiry as an important strand in every teacher's professional identity and practice.



## Northern Ireland

On paper, the Northern Ireland system appears committed to many of the features that constitute a high performing teacher education system. As early as 1998, continuity between initial training, early professional development and continuing professional development frameworks were put in place, involving partnership working between higher education institutions, government agencies, Education and Library Boards and schools.

Subsequently, a clear commitment to reflective practice and research engagement was expressed, for example, in the GTCNI's Code of Values and Professional Practice and the Teacher Competence Framework published in 2007.

In practice, however, the framework has not been used widely beyond initial teacher education and partnership working has been hampered by the demise of earlier stakeholder forums and by running down support services in anticipation of the creation of a single Education and Skills Authority, which may not now materialise. In addition a review of teacher education, initiated in 2003, has not yet been completed, which in turn has hampered developments in CPD and stalled the wider dissemination of an e-portfolio initiative aimed at encouraging teachers to record and reflect on their own classroom teaching and ongoing professional development. A further complication is that two government departments have responsibility for different aspects of teacher education. Currently, the commitment to research is strongest in initial teacher education, where active involvement in classroom research is valued, although this is unevenly developed across providers.

To enable the long-standing expectation that teachers engage in research and enquiry to become a consistent reality on the ground, the Inquiry recommends that, in Northern Ireland:

- » **Continuing professional development**

Policymakers need to work with the various partners in the Northern Ireland system to establish a statutory CPD entitlement to career-long professional learning for all teachers.
- » **Partnership working**

A stakeholder forum needs to be established to facilitate the sort of partnership working that ensures that all professional development initiatives are properly coordinated in the interests of all learners and all teachers. ITE and CPD providers should foster closer links with local school-to-school partnerships to encourage and support research engagement in all schools and colleges.
- » **Research capacity**

The University Colleges and university departments and faculties of education need to collaborate to build research capacity across initial teacher education and to embed research informed and accredited CPD provision so that all may benefit from existing high quality work.
- » **The Teacher Competency Framework**

The Department of Education in Northern Ireland needs to work with its partners to revise the Teacher Competency Framework so as to make this a more succinct and helpful working document for schools promoting research informed reflective practice.
- » **The Inspection Framework**

The Education and Training Inspectorate (ETI) in Northern Ireland needs to revise the Inspection Framework so that the inspection process plays its part in encouraging the development of research-rich school and college cultures, and in providing reliable evidence about the extent of teachers' engagement in research and enquiry in Northern Ireland.

# 5

# CONCLUSIONS AND NEXT STEPS

This Inquiry has uncovered strong evidence that teachers and teacher educators need to engage *with* research, both in terms of their subject and phase specialism, and with regard to developments in education more broadly.

There is also strong evidence that teachers and teacher educators need to be equipped to engage *in* enquiry-based practice, which means having the capacity, motivation and opportunity to use research related skills to investigate what is working well and what isn't effective in their own practice.

The Inquiry has stressed that the development of a research-rich culture is vital if schools and colleges are to develop and sustain the capacity for self-improvement. To this end, the full range of agencies involved in education – statutory bodies, teaching unions, professional and subject associations, local authorities and academy chains – need to exercise leadership amongst their members and partners in promoting the use of evidence, enquiry and evaluation to prioritise the role of research and to make time and resources available for research engagement.

As a reflection of different learner and professional development needs, policy priorities and frameworks, and practice traditions, the Inquiry has offered a range of jurisdiction-specific recommendations for England, Scotland, Wales and Northern

Ireland. This diversity of outlook and practice across the UK has widened in recent years and amounts to a 'natural experiment'.

Given the potential significance of these diverse approaches to both initial teacher education and teachers' continuing professional development, there is an urgent need for UK-wide research to monitor the impact of different approaches on teachers' learning, outcomes for students, and school and college

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*[Teachers'] research and innovation is futile if kept in the isolated environment of the single classroom ... There seems to be little opportunity to share individual innovation in my school, or for my colleagues to pose the question "why are you doing that?"*

**Teacher (Secondary)**

improvement. The ESRC and/or one or more national charities or charitable foundations might fund this research. Additionally, policymakers should be encouraged to share their perceptions and seek to learn from each other between the jurisdictions. There is considerable potential for greater dialogue than currently takes place, and economies of scale to be gained in the process.

The Inquiry bases its recommendations on a significant evidence base but recognises the need for further large-scale and in-depth research in this field. In particular, there is a need for more research that looks systematically at the effectiveness of different types of initial teacher education.

Nevertheless, members of the Steering Group are confident that the Inquiry's explorations have given rise to an analysis and a set of recommendations that are secure and which they urge policymakers, school, university and college leaders, and classroom practitioners to accept.

We believe that taking the essentially modest steps proposed by the Inquiry will assist us to develop world class education systems across the UK – systems fit for the twenty-first century, systems that have the capacity for self-improvement, systems driven by professionals informed by the latest research and committed to keeping their own practice under review in light of the lessons offered.



# APPENDIX 1:

## MEMBERSHIP OF THE INQUIRY

### Membership of the Steering Group

Professor John Furlong, University of Oxford (Chair)  
 Professor Ian Menter, University of Oxford  
 Professor Pamela Munn, University of Edinburgh  
 Professor Geoff Whitty, Bath Spa University  
 Joe Hallgarten, Director of Education, RSA  
 Nick Johnson, Executive Director, BERA

### Membership of the Reference Group

Bob Burgess, Teacher Education Advisory Group  
 John Craig, Higher Education Academy  
 Bob Davies, Scottish Teacher Education Committee  
 Karen Evans, General Teaching Council for Wales  
 Linda Evans, British Educational Leadership, Management and Administration Society (BELMAS)  
 Anthony Finn, former General Teaching Council for Scotland  
 Carmel Gallagher, General Teaching Council for Northern Ireland  
 Dennis Hayes, Standing Committee for the Education and Training of Teachers  
 Peter Kent, Association of School and College Leaders (ASCL)  
 Tom Middlehurst, Schools Network (SSAT)  
 Ken Muir, General Teaching Council for Scotland  
 Deirbhile Nic Craith, Standing Conference on Teacher Education North and South  
 James Noble Rogers, Universities Council for the Education of Teachers (UCET)  
 Darren Northcott, National Association of Schoolmasters / Union of Women Teachers (NASUWT)  
 Hank Roberts, Association of Teachers and Lecturers (ATL)  
 Karen Robinson, National Union of Teachers (NUT)  
 Harry Torrance and Ellie Johnson-Searle, Academy of Social Sciences  
 Greg Wade, Universities UK  
 David Weston, Teacher Development Trust

### Special Advisers

Graham Donaldson  
 Carmel Gallagher  
 Sir Alasdair Macdonald  
 Lord David Puttnam  
 Sir Alan Steer

## APPENDIX 2: TERMINOLOGY

Throughout this report a number of key terms are used. These are defined below:

### Research

The Inquiry has taken a deliberately inclusive and wide-ranging definition of research. By research, the report's authors mean any *deliberate* investigation that is carried out with a view to learning more about a particular educational issue. This might take a variety of forms and be concerned with a range of issues, for example: the secondary analysis of published data on school exclusions, interviewing a range of colleagues about examination performance in the English Department, taking part in a national Randomized Control Trial concerned with the teaching of Mathematics, responding to a survey about teachers' use of the internet to inform curriculum planning, working with a university department of education on a study into teachers' use of new technology.

### Enquiry-based learning

Much of the kind of activity that the professional research community might define as “action research” is more commonly referred to by teacher-researchers as enquiry-based practice; this is the term that has been used in this report.

### Research literacy

Where reference is made in the report to “teachers having a high level of *research literacy*” or “teachers being *research literate*”, this refers to the extent to which teachers and school and college leaders are familiar with a range of research methods, with the latest research findings and with the implications of this research for their day-to-day practice, and for education policy and practice more broadly. To be research literate is to ‘get’ research – to understand why it is important and what might be learnt from it, and to maintain a sense of critical appreciation and healthy scepticism throughout.

### Research engaged

Throughout the report the term “research engaged” refers to the involvement of teachers and school and college leaders in the *doing* of research. Such engagement may take many forms, from the in-depth analysis of comparative school performance data to the carrying out of Randomized Control Trials in partnership with, and probably under the supervision of, professional researchers in a university department of education.

### Research-rich

The report's authors use the term “research-rich” to refer to environments, usually schools and colleges, in which research thrives. Research-rich schools and colleges encourage innovation, creativity and enquiry-based practice (see below), enabling teachers and leaders to drive change, rather than have it ‘done’ to them.

### Research informed clinical practice

As noted in the interim report, the notion of 'clinical practice' in education essentially conveys the need to bring together knowledge and evidence from different sources, through a carefully sequenced programme which is deliberately designed to integrate teachers' experiential learning at the 'chalk face' with research-based knowledge and insights from academic study and scholarship. Some educationalists criticise clinical practice models because they see them as being overly associated with the medical profession and with, therefore, a quite different professional context. However, in considering the evidence presented to the Inquiry, the authors of the report were impressed by the rigour of the clinical practice model and their association with career-long, context-applied learning.

## APPENDIX 3: METHODOLOGY

In the course of this Inquiry, seven academic papers have been commissioned, six of which are published in summary as part of our interim report. All seven are published in full on the BERA website: [www.bera.ac.uk](http://www.bera.ac.uk).

These papers, produced by a range of internationally recognised experts, address international and UK policy and practice on teacher education; philosophical reflections on the nature of teachers' professional learning; innovative programmes of initial teacher education based on the model of research informed 'clinical practice'; the role of research in effective continuing professional development (CPD); the impact of research-based teaching on school improvement and student outcomes; and research engagement from the teacher's perspective. The full set of papers and authors is listed at the close of this report (Appendix 4).

To supplement the information and evidence gained through the commissioned papers, the Inquiry issued a Call for Submissions in July 2013, which ran for six weeks until August 2013. Thirty-two responses were received in total, capturing a wide array of opinions from key audiences: higher education institutions, professional associations, training providers, policy analysts and teachers. A full report of the responses is available on the BERA website.

The Inquiry process has been designed to allow for extended critical review of the emerging findings, through internal discussion of the draft papers by commissioned authors at an Inquiry seminar in July 2013, a joint presentation of the emerging findings at a spotlight session at the British Educational Research Association Annual Conference at the University of Sussex in September 2013; and through further presentations to the Universities Council for the Education of Teachers (UCET) Research Committee in October 2013, at the UCET Annual Conference in November 2013, and at the American Educational Research Association (AERA) conference in April 2014.

The Steering Group has also benefited from expert advice and critical feedback from its Special Advisers, and from the Inquiry's Reference Group (Appendix 1), comprised of representatives from 19 leading organisations involved in education, including experts in teacher education policy and practice from each of the four nations.

At the launch of the interim report, a UK-wide consultation event was held at the RSA in London with a range of leading figures in teacher education and related fields, and the Steering Group has subsequently engaged in a series of exploratory meetings with key influencers in the fields of educational policy and practice in England, Scotland, Wales and Northern Ireland.

The purpose of the consultation event and this series of meetings was to both 'test' the analysis presented in the interim report *and* to ensure that the deliberately UK-wide analysis sufficiently captured the detail of current practice in each of the jurisdictions, recognising the good practice that is already underway in various contexts.

## APPENDIX 4:

# BACKGROUND PAPERS

The following academic papers were commissioned in the course of the Inquiry:

- **Paper 1:** *Policy and Practice within the United Kingdom*, Professor Gary Beauchamp (Cardiff Metropolitan University), Professor Linda Clarke (University of Ulster), Dr Moira Hulme (University of Glasgow) and Professor Jean Murray (University of East London)
- **Paper 2:** *The Role of Research in International Policy and Practice in Teacher Education*, Dr Maria Teresa Tatto (Michigan State University)
- **Paper 3:** *The Contribution of Educational Research to Teachers' Professional Learning – Philosophical Understandings*, Professor Christopher Winch (King's College, University of London), Dr Janet Orchard (University of Bristol) and Dr Alis Oancea (University of Oxford)
- **Paper 4:** *Review of 'research-informed clinical practice' in Initial Teacher Education*, Dr Katharine Burn and Trevor Mutton (University of Oxford)
- **Paper 5:** *The Contribution of Research to Teachers' Continuing Professional Learning and Development*, Philippa Cordingley (Centre for the Use of Research and Evidence in Education)
- **Paper 6:** *Teacher Quality and School Improvement: What is the Role of Research?*, Dr Monica Mincu (University of Turin)
- **Paper 7:** *Teachers' Views: Perspectives on Research Engagement*, Professor David Leat, Rachel Lofthouse and Anna Reid (Newcastle University)

The first six papers are summarised in the interim report and all are published in full on the BERA website: [www.bera.ac.uk](http://www.bera.ac.uk).

# ACKNOWLEDGEMENTS

The Steering Group would like to thank each of the authors for their excellent work on producing the academic papers commissioned for this Inquiry: Gary Beauchamp, Linda Clarke, Moira Hulme and Jean Murray; Maria Teresa Tatto; Chris Winch, Janet Orchard and Alis Oancea; Katharine Burn and Trevor Mutton; Monica Mincu; and David Leat, Rachel Lofthouse and Anna Reid. Special thanks go to the Inquiry's special advisers, Graham Donaldson, Carmel Gallagher, Sir Alasdair Macdonald, Lord David Puttnam and Sir Alan Steer and to the members of the Reference Group, who have contributed actively to reviewing our emerging findings.

We would also like to thank those from a range of practitioners, agencies, inspectorates, institutions and interest groups who met with us during the course of the Inquiry, individually and collectively, in Belfast, Cardiff, Edinburgh, London and elsewhere.

Particular thanks are due to Tony Breslin at Breslin Public Policy for drafting this final report on behalf of the Inquiry's Steering Group, and to Louise Bamfield at the RSA for compiling the earlier interim report.

In addition, we are grateful to the BERA office for their administrative support and to Sarah Newman for editing the individual papers. At the RSA, we would like to thank the secretariat, Louise Bamfield and Selina Nwulu as well as the RSA Chief Executive, Matthew Taylor.

Finally, we are very grateful to all those who responded to the Inquiry's Call for Submissions on behalf of themselves and/or their institutions and organisations.

This project was initiated by the Executive Council of BERA and has been funded by the Association.

## ABOUT BERA

The British Educational Research Association (BERA) is a member-led charity. It exists to enhance the field of study, the growth of public knowledge and critical understanding, and the application of findings for the improvement of educational policy and practice. It strives to ensure the best quality evidence from educational research informs policymakers, practitioners and the general public. Educational research can contribute to economic prosperity, cultural understanding, social cohesion and personal flourishing.

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## ABOUT THE RSA

The Royal Society for the Encouragement of the Arts, Manufacturing and Commerce (RSA) is an enlightenment organisation, committed to finding innovative practical solutions to today's social challenges. Through its ideas, research and 27,000-strong Fellowship, it seeks to understand and enhance human capability so that we can close the gap between today's reality and people's hopes for a better world.

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Engagement in and with research can be a very positive experience for teachers. Broadly speaking, it improves their working lives, gives them new perspectives and makes them more sensitive to students' experiences of classrooms.

#### Evidence presented to the Inquiry

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We learned a lot, but we also learned that we need to learn a whole lot more ...

##### Head Teacher (Primary)

[I am] far more reflective as a senior leader ... As a deputy head teacher I was able to use my research findings to change policy and practice of self-evaluation ... Reflection and a constant awareness of the need to question my own thinking, connected my learning and practice. It was a very inductive exercise all in ...

##### Deputy Head Teacher (Secondary)

I'd not done this kind of research before and I think I'd underestimated the power it had for helping me learn about teaching and being able to identify things that work ...

##### Teacher (Secondary)

I have really contributed to new knowledge. It's made me think about that. How you do that all the time? ... It has made me think a lot more than I do when I am on [the] planning and evaluating treadmill.

##### Student Teacher

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