



**Evidence for
Excellence in
Education**

NFER Thinks

What the evidence tells us

Why effective use of evidence in the classroom needs system-wide change



Teaching is not currently an evidence-informed profession, despite successive attempts over the years to encourage this.

In this *NFER Thinks* we argue for system-wide change to ensure that evidence is used to the benefit of *all* learners. This requires a coordinated set of actions across the teaching and research professions alongside some supporting infrastructure developments.

Published to coincide with an NFER-hosted event in partnership with the Coalition for Evidence-based Education, this paper provides some outline proposals. The event will focus on generating collaborative, cross-sector suggestions on *how* such proposals can be taken forward.

An evidence-informed system?

This *NFER Thinks* draws on our recently published review (Nelson and O’Beirne, 2014). The review covers a wide range of issues including: strategies adopted by individual schools and organisations to improve their use of evidence; and the role of teacher-led research and enquiry. These are important issues that we intend to return to over the coming months, but they are outside the scope of this paper. Here we focus specifically on developments that are required at a *system level*.

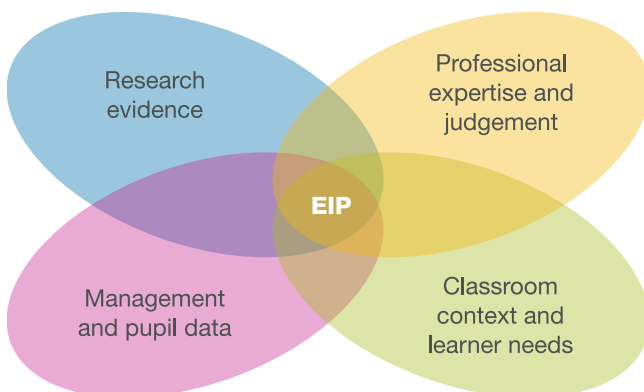
The call for a greater application of evidence in teaching practice is not new (see Hargreaves, 1996). There have been developments over a number of decades including programmes to improve the flow of evidence into practice and the recent establishment of the Cabinet Office *What Works Centres* (the Education Endowment Foundation specifically). Ben Goldacre’s paper: *Building Evidence into Education* (Goldacre, 2013) reflects an enhanced government interest in evidence use and has raised the profile of the debate. Additional policy developments have created further opportunities and challenges. These include a focus on school ‘self improvement’ coupled with a drive for high quality teaching within a devolved, and increasingly autonomous, education system. Nevertheless, the education profession cannot yet be described as *evidence-informed*.

What do we mean by ‘evidence-informed practice’ (EIP)?

The term ‘evidence’ invites a number of interpretations, including, for example: research; pupil performance and other management data; and ‘tacit’ professional knowledge. In this paper, we focus specifically on *research evidence* collected through systematic and established formal processes, normally by professional researchers.

However, we are also interested in how such research evidence gets used alongside these other sources. The term *evidence-informed practice* allows us to think about the ways in which teachers use research evidence, in conjunction with various other sources of evidence and expertise available to them, in order to make decisions. This is illustrated in **Figure 1** below.

Figure 1 Evidence-informed practice (EIP)



The issue that we are concerned with in this paper is that there are a number of factors currently preventing schools from accessing or using the *research evidence* component of the diagram above in their development planning or teaching and learning.

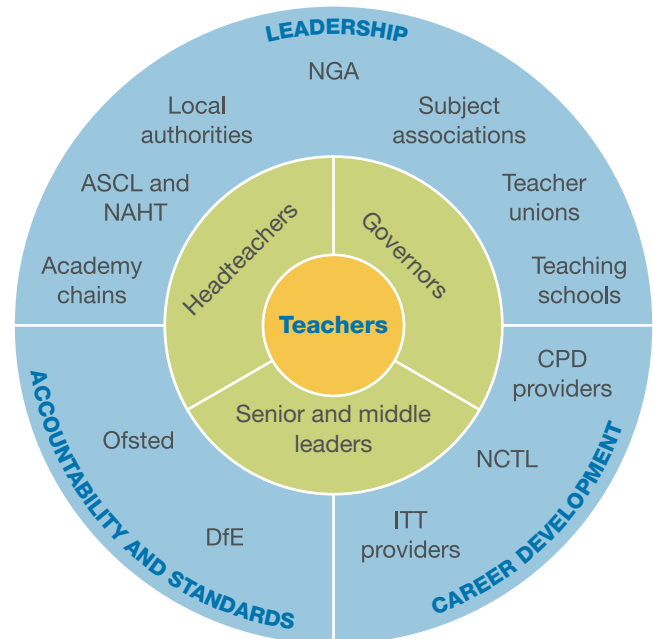
Creating a demand for evidence

First and foremost, to achieve widespread change, there must be a demand for research evidence from teachers. But stimulating demand among a profession under constant pressure to deliver results in an ever-changing environment is not straightforward.

For teachers to seek out evidence, they must have the *motivation* and the *opportunity* to do so. They need to believe in its value in informing and improving practice, and must trust that it does not undermine their professional autonomy. They must also have the necessary time to be able to access relevant evidence, and the training to interpret and apply findings appropriately.

In the current climate of greater school autonomy, much of the power to bring about change lies with individual school leaders and governing bodies. So how can we ensure that change occurs throughout the school *system*, rather than just in isolated pockets that depend on one or two well-motivated individuals? The answer lies with the range of organisations that continue to have a national influence in schools, as illustrated in **Figure 2** and described below.

Figure 2 National influence in schools



Leadership. There is a crucial role here for unions representing the teaching profession, and specifically for leadership associations such as the Association of School and College Leaders (ASCL) and National Association of Head Teachers (NAHT). The National Governors Association (NGA), subject associations, and organisations leading groups of schools such as local authorities, academy chains and teaching schools are also key. Whereas promotion of evidence-use by research organisations (or central government) might be regarded with suspicion, these organisations are well-placed to recognise and promote the role of evidence in benefiting teachers and teaching. A future Royal College of Teaching could also have a role to play.

Career development. This should be from initial teacher training (ITT), through continuing professional development (CPD), to the National Professional Qualification for Headship (NPQH). There is a role here for the National College of Teaching and Leadership (NCTL), ITT providers including teaching schools, and for CPD providers.

The opportunity is twofold:

1. Teacher development programmes can be enhanced by becoming more evidence-informed. Course providers should ensure that the practices they are promoting are supported by evidence. Additionally, there should be more evaluation of the programmes themselves, in order to establish the extent to which they lead to improvements in professional practice and learner outcomes.
2. Specific training on the use of evidence can empower teachers to engage critically with research. It can help them develop the skills needed to weigh up the merits of different forms of evidence, and research methodologies, in order to decide whether and how to make use of the findings.

Accountability and standards

- **Ofsted** – There should be a role for Ofsted in modelling effective evidence use within its guidance and advising schools (and ITT providers) on how best to use evidence to support their development, teaching and learning.
- **Teacher standards** – The demonstration of effective evidence use could become an explicit criterion for progression into (or within) middle or senior school leadership. At the senior leadership level, this could be achieved by including new criteria within national performance management guidelines, and at the middle-management level, by inclusion in teaching and learning responsibility (TLR) point criteria.
- **Accreditation and financial incentives** – We believe that it would be useful to develop a system of accreditation for schools that are proven to be evidence informed. There are a variety of potential accreditation models, one of which is NFER's Research Mark. The government could play a part here by providing resources to schools that receive such accreditation to enable them to share practice with other schools, or to become actively involved in expanding the evidence base.

Creating an effective supply of evidence

Another major factor for teachers is, of course, the availability of an easily accessible supply of relevant, high-quality evidence. Achieving this will depend on the ability of researchers, policymakers and research commissioners to overcome a variety of cultural and practical challenges. Unlike the teaching profession, the research community lacks collective representation or leadership. The potential 'levers' for systemic change are therefore less clear.

However, the majority of educational research is undertaken at the behest of commissioners, policymakers or grant-giving organisations. Organisations such as the Department for Education (DfE), the Education Endowment Foundation (EEF), the Economic and Social Research Council (ESRC), and a wide range of charitable foundations thus have a critical role to play.

One result of the current commissioning and research process is that there is a tendency towards a fragmentation of individual research studies, rather than the development of authoritative corpus of knowledge. While 'evidence' is abundant, at present it has a number of shortcomings: it can be of variable robustness and accessibility and be difficult for teachers and others to 'sift'; is rarely suitably synthesised or translated for application in practice; and may not answer the questions of real interest to teachers in a full and systematic way.

We outline below a number of actions which, if taken forward in parallel, could make substantial inroads in overcoming these challenges.

1. **School-level needs and interests should have greater priority in influencing research commissioning.** First, commissioners, policymakers and researchers need to identify the questions that schools need answers to and respond to these. Second, commissioners should be willing to fund collaborative approaches that enable teachers to be involved as active partners (rather than passive participants) in cross-school research projects. Third, there should be a greater focus on the 'transformation' of evidence within the commissioning process, so that major outcomes of research include useful tools for practice and social interaction processes that can help teachers to apply evidence effectively.
2. **Future research commissions should build on existing evidence.** Commissioners and policymakers need to join up their intelligence to ensure that new research complements existing knowledge. They also need to focus on the synthesis of existing evidence through teacher-friendly tools. The EEF's Teaching and Learning Toolkit¹ is an important development, but is a first step. There is more to do to make interventions that have been shown to work 'classroom-ready', and commissioners need to build on the Toolkit by filling some of the identified gaps in the evidence base.
3. **Standards should be developed for the classification of research methods and reporting.** If such standards were widely adopted, it would make it easier for teachers (and others) to weigh up and interpret the findings from different studies. Agreeing such standards will require cooperation across the research community, and testing for usability and accessibility by teachers.

Creating a supporting infrastructure

We already have a vast national education infrastructure. This supports everything from teacher training, school funding and the curriculum through testing and accountability to research funding and production. However, there are some missing links that, if added, would help realise the full potential of an evidence-informed profession.

These additional components would support various stages in a cycle of evidence production and use, illustrated in **Figure 3**. Crucially the cycle begins with teachers identifying the areas of research currently needed to support their practice.

A research theme bank providing a mechanism for teachers to shape the research agenda. This would provide a forum for teachers to formulate and submit specific research questions, or for teacher groups to discuss areas for research around major themes. It would need to be available for interrogation by teachers, researchers, policymakers and commissioners. To be effective, such a resource would need engagement from both the teaching and research communities, supported by some of the influential organisations discussed earlier in this paper. NFER recently ran a small-scale pilot of a research theme bank, and is developing a more detailed specification for sharing with potential partners.

1 <http://educationendowmentfoundation.org.uk/toolkit/>

Figure 3 Evidence cycle



A school research directory enabling schools to register their interest in taking part in research addressing specific questions or themes. Having ready-made groups of schools willing to participate in specific research projects would enable more research to be undertaken on topics of interest to schools; it would also provide a mechanism for linking like-minded schools with a common interest in developing practice. Such a resource would be a natural evolution of NFER's existing Register of Schools used to support our own research projects.

Education trials units developed to provide technical support to groups of schools that are interested in trialling new innovations. Randomised Controlled Trials (RCTs) are the most robust means of establishing causal relationships between interventions and their intended outcomes, but relatively few are currently undertaken – notwithstanding those now being funded by the EEF. Other commissioners could do more to support schools that are keen to trial specific innovations by committing a portion of their budgets to funding them to do so, supported by professional trials units.

A one-stop resource that organises and summarises the latest research evidence across a comprehensive range of topics. The EEF toolkit is widely regarded as a positive development, but it has a specific emphasis on supporting disadvantaged pupils. There is scope for some complementary content (or a complementary resource) that responds directly to the topics identified by schools through a research theme bank, or similar database. This would ensure that the range of topics covered was of direct interest to schools, and potentially broader in scope than the support of disadvantaged pupils exclusively.

Conclusion

Many of the recommendations made in this paper are not new. Nevertheless, as research and teaching communities we have yet to make substantial progress in realising the benefits of working together more effectively. This paper speaks to those individuals and organisations with the potential to support a greater use of evidence in practice. It also serves as a statement by NFER, a key player in the education research landscape, that we intend to play our part in bringing about the changes that are needed.

References

- Goldacre, B. (2013). *Building Evidence into Education* [online]. Available: <http://media.education.gov.uk/assets/files/pdf/b/ben%20goldacre%20paper.pdf> [8 January 2014].
- Hargreaves, D. (1996). 'Teaching as a research-based profession: possibilities and prospects.' Paper presented at the Teacher Training Agency Annual Lecture, April [online]. Available: <http://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/TTA%20Hargreaves%20lecture.pdf> [8 January 2014].
- Nelson, J. and O'Beirne, C. (2014). *Using Evidence in the Classroom: What Works and Why?* Slough: NFER. www.nfer.ac.uk/publications/IMPA01/ [23 January 2014]

Authors

Ben Durbin, head of impact at NFER, and Julie Nelson, research director in NFER's impact team.

NFER is a charity with a reputation worldwide for providing independent and robust evidence for excellence in education and children's services. Our aim is to improve education and learning, and hence the lives of learners, by researching what is happening now. Our authoritative insights inform policy and practice, offering a unique perspective on today's educational challenges.

We work with an extensive network of organisations, all genuinely interested in making a difference to education and learners. Any surplus generated is reinvested in research projects to continue our work to improve the life chances of all learners from early years through to higher education.

Ben Durbin



Ben Durbin is head of impact at NFER. He leads a team focused on engaging more effectively with teachers, education leaders and policymakers so that our evidence can support positive change.

Ben previously worked in the Research Department at NFER, and is an expert in the use of statistical and economic analysis in educational research. He has developed methodologies and led analysis for research and evaluation projects across a broad spectrum of policy areas.

He has a particular interest in value-for-money assessment and led the NFER's development in this area, providing evidence of how better outcomes can be achieved for lower cost, and supporting the case for investment in education and children's services.

Julie Nelson



Julie Nelson is a research director in NFER's impact team, which exists to ensure that NFER's evidence is of positive benefit to policymakers, teachers and others involved in the education sector, and to support them to use evidence in their decision-making and practice.

She previously worked in the Centre for Evidence and Evaluation in the Research Department at NFER, where she managed a variety of qualitative and quantitative research projects, and literature reviews, for government departments and educational agencies at local and national levels.

As well as her interests in the effective uses of evidence in policy and practice, Julie has particular research expertise in issues related to educational disadvantage and underachievement, young people not in education, employment or training (NEET), vulnerable groups and child poverty.

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National Foundation for Educational Research
The Mere, Upton Park
Slough, Berks SL1 2DQ

T: 01753 574123
F: 01753 691632
E: enquiries@nfer.ac.uk
www.nfer.ac.uk

