



**Evidence for
Excellence in
Education**

Research Summary

Using Evidence in the Classroom: What Works and Why?

National Foundation for Educational
Research (NFER)



Using Evidence in the Classroom: What Works and Why?

Julie Nelson and Clare O'Beirne

Background

This summary presents the findings and conclusions from a rapid evidence review written and published by the National Foundation for Educational Research (NFER). Our review synthesises what is currently known about effective approaches to school and teacher engagement with evidence and highlights 'weak spots' or areas for attention if this ambition is to be realised.

This review is published at a time when many organisations (including government), academics and teachers are seeking to develop strategies that will enable the teaching profession to make best use of existing evidence about what works in improving educational outcomes and the reasons for this. This is partly in response to increasing levels of school autonomy, which create both increased responsibility and accountability for headteachers and governors, alongside the potential for increased opportunity to shape practice.

The debate about the need for an evidence-informed teaching profession is not new. David Hargreaves' seminal lecture to the Teacher Training Agency (Hargreaves, 1996) is regarded by many as the speech that sowed the seeds for the 'evidence into education' movement (in contemporary parlance, this is often referred to as the *knowledge mobilisation* (KMb) movement). More recently, the debate has been reinvigorated following the impact of Ben Goldacre's paper: *Building Evidence into Education* (Goldacre, 2013). Goldacre argues that the education profession is still far from evidence based, despite the range of programmes developed during the 1990s and 2000s designed to mobilise knowledge within the profession.

Key findings

Systemic issues and solutions

When commentators talk about KMb, they refer to a process by which evidence is produced by research organisations, transformed into accessible and usable outputs through a process of collaboration and/or mediation, and implemented by teachers in order to develop their teaching practice and enhance learner outcomes.

In the interests of ease and clarity, we use the term KMb throughout the review when describing the use of evidence in educational practice. We recognise, however, that it ascribes primacy to evidence produced by research organisations and also describes a research community-driven sense of the importance of the use of evidence in education. With this in mind, the review also considers additional issues related to: schools' own demand for evidence (and factors that both facilitate and inhibit this); the role of teacher-led research and enquiry (either independent of, or connected to evidence produced by research organisations); and the place of these developments within the debate about an evidence-informed teaching profession.

The 'case' for teachers engaging with evidence is that teaching practice and learner outcomes can potentially be enhanced by effective identification and application of the evidence around the most effective approaches to teaching and learning. Our review has found that:

- KMb is not a linear process; it requires social and behavioural change on the part researchers and teachers.
- Evidence needs to be transformed for use in teaching practice, rather than simply summarised. This can happen through effective interaction and collaboration between teaching professionals and researchers, and/or via intermediary organisations.
- There is no current system to support evidence transformation, nor is there an easily identifiable group of organisations or individuals with responsibility for mediation. Responsibility is dispersed and where transformation occurs, it tends to be piecemeal.

- An effective KMb system requires some form of central, leadership and coordination. Government should have a major role in enabling and managing the overall infrastructure of a KMb system. In addition, a body for the teaching profession, leading on teaching and learning and on the use of evidence in education, could help to enhance the impetus for knowledge production and use within the profession itself.

The review firstly considers issues related to teacher engagement *with* evidence produced and transformed by researchers and then goes on to discuss teacher involvement *in* their own research and enquiry. In terms of teacher engagement *with* evidence we consider firstly best practice in knowledge production and transformation and secondly best practice in knowledge engagement and use.

Best practice in knowledge production and transformation

- A centralised knowledge base providing clear summaries of effective interventions (established through robust and accurate research) could help to improve teacher use of, and confidence in, evidence.
- The evidence needs to be contextualised for practice and presented in clear, accessible formats, using media which is accessible and includes practical guidelines for implementation, rather than simply being produced in its raw form.
- Intermediaries can be used to translate evidence into tools for implementation in the classroom. Collaboration between teachers and researchers can also lead to a better understanding and use of evidence.
- There is a need for much better evidence of the impact of different approaches to transforming knowledge. The evidence base should be established before too much resource is invested in developing a flow of evidence for practice.

Best practice in knowledge engagement and use

- Teachers' belief in evidence and its value is important if the vision of an evidence-informed teaching profession is to become a reality. Belief needs to be driven by the profession, although researchers can assist by improving the quality and accessibility of evidence.
- A clear voice for the teaching profession on the use of evidence to promote professional independence is required. Professional associations and the Department for Education (DfE), amongst others have a role in helping to facilitate this.
- A focus on the role of evidence should be strengthened amongst initial teacher training and CPD providers and providers of school leadership training. Teachers should also be equipped with strategies for critically appraising and using evidence.
- There is a need for much more evidence on the relative benefits of different models of research engagement and use.

The role of teacher-led research and enquiry

- Teacher-led research or enquiry is not a homogenous activity. It serves different purposes and uses a variety of methods. At its most effective, the methods used are closely linked to, and fit for, purpose. It can be conceived to inform a national knowledge base, to support school self evaluation or improvement or to support individual-level professional development, for example.
- The methods adopted, and the factors that enable their success, are different according to the purpose of the research.
- The distinction between engaging *in* and *with* research can be overstated. Teachers undertaking research are often more disposed to engage with external evidence to support their enquiry than those who are not. The two processes are not mutually exclusive, and in the best examples, they complement each other.
- There can be an overemphasis on the development of teacher research skill as an end in its own right rather than as a means to an end (improved professional practice or better learner outcomes). Schools, collaborative networks, training providers and professional associations have a role to play here in defining the purpose of teacher-led research and enquiry and supporting best practice.

Conclusions

The findings from this review highlight that system change will not occur in a coordinated fashion without some level of central oversight. **Government** has a vital role to play in overseeing the infrastructure of a national KMb system. Additionally, there is an argument that an excellence institute for education akin to those that exist in medicine and social care could also be a helpful development.

Currently, there are a number of barriers to teachers' effective engagement with external evidence.

Teacher representation bodies such as the national Association of Head Teachers (NAHT), Association of School and College Leaders (ASCL) and the National College for Teaching and Leadership (NCTL), and teaching schools alliances, need to nurture the impetus for an evidence-informed teaching profession. Education will not become evidence informed if calls emanate solely from the research community.

Schools, collaborative networks, training providers and professional associations have a key role to play in brokering key messages. These include that the distinction between teachers engaging *in* and *with* research can be overstated, and that an overemphasis on the development of teacher research skill as an end in its own right is less helpful than teacher research as a means to an end.

Research organisations and intermediary bodies need to transform (rather than simply produce, synthesise or summarise) evidence for practice. It is important that, within this process, the importance of social interaction is not overlooked.

Finally, **funding organisations** need to commission evaluations of different approaches to KMb. There is a need for: better descriptions of varied approaches; evaluations of the relative benefits of different approaches; and impact assessments of the relationship between KMb approaches, professional practice development and learner outcomes.

Methodology

The review is underpinned by a systematic process for item searching, screening, appraisal and synthesis. Through our screening processes we have endeavoured to select the most methodologically sound studies for analysis. However, the research base relating to tried and tested methods of developing evidence use within the teaching profession is incredibly scant and hence we have had to adopt a 'best available evidence' approach to item selection. This means that some of the approaches discussed are based upon observations or small-scale qualitative research, rather than upon trials or rigorous quantitative measurement. Following the search, the review team adopted a three-stage process to filtering the search results.

- **Screening** – all identified items (426) were 'screened' for relevance (on the basis of information provided in abstracts) using a detailed coding frame. Thirty 'key items' were identified as a result.
- **Appraisal** – using a detailed appraisal template for each selected item, the review team read and summarised each key item under a number of key headings related to research design, study findings, and relevance.
- **Synthesis** – the reviewed data was analysed in order to draw out emerging themes and key messages.

The review was assisted by the support of two expert advisers, Dr Jonathan Sharples of the Education Endowment Foundation and Dr Caroline Kenny of the EPPI Centre at the Institute of Education.

How to cite this publication:

Nelson, J. and O'Beirne, C. (2014). *Using Evidence in the Classroom: What Works and Why? Research Summary*. Slough: NFER.

Published in January 2014

© 2014 National Foundation for Educational Research

Registered Charity No. 313392

ISBN: 978-1-910008-08-9 (NFER ref. IMPA)

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

