

# Developing Knowledge Mobilisation to Challenge Educational Disadvantage and Inform Effective Practices in England

## Discussion Paper

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### FOREWORD FROM DR KEVAN COLLINS, EDUCATION ENDOWMENT FOUNDATION CHIEF EXECUTIVE

“ EDUCATIONAL RESEARCH is sometimes accused of uncertainty to the point of uselessness. Academics are as a rule cautious, and can be reluctant to answer the question we most want answered:

#### **‘What should I do?’**

But we have made progress over time, and today there are some things research is relatively clear on. One such finding is that *reducing class sizes is unlikely to be the most effective way to increase attainment*. Evidence summarised in the Sutton Trust-EEF Teaching and Learning Toolkit suggests that while reducing class sizes below 20 may have a moderate positive impact on attainment, above this level reductions are unlikely to have a large impact on grades. Put simply, compared to reducing class sizes there are likely to be other spending choices which lead to more impact for less money.

So, how has this knowledge influenced decision making in schools? The answer appears to be not very much. In fact, teachers surveyed by the Sutton Trust in 2012 identified reducing class size as their top priority for pupil premium spending. An average secondary school receives £53,000 from the pupil premium in 2012/13, and it is likely that providing schools with better information about how to use this money in a different way will lead to a greater increase in attainment. For example, with £53,000 it would be possible to buy approximately 2000 hours of one-to-one tuition for pupils, or send 26 members of staff on training to improve the quality of the feedback they provide to pupils, including supply cover. In fact, research has consistently shown that providing effective feedback is the single most powerful way of improving attainment, but less than 3% of teachers in the survey identified this as a top spending priority.

The third highest priority identified in the Sutton Trust survey was increasing the amount of one-to-one tuition in schools, and this is indeed a better bet than reducing class sizes. However, research can again provide a better steer, showing that *small group tuition is likely to be as effective as one-to-one tuition at increasing attainment*. This means the same benefit can be delivered to two or three times as many students for the same cost.

In my view, the problem of knowledge transfer is not limited to research from universities; there are breakdowns in school to school communications too. Imagine a school develops an innovative parental engagement strategy over a number of years, which is rigorously evaluated and found to be a key contributor to the school’s excellent results. The school’s head teacher may well help other local schools adopt the strategy, but the likelihood of it spreading beyond this is minimal.

Likewise, imagine that a computer programme targeted at students struggling with mathematics is trialled across a chain of schools. It is independently evaluated and found to have a significant positive impact on attainment. Its developers will enter the marketplace, but I suspect that they are

likely to struggle to compete with other products which are not evidence-based but that have better marketing materials and produced by already recognised brands in the education sector.

The gaps between research and practice, and the general weakness of evidence as a currency, matter. They suggest that there are ways we could reallocate our resources today which would increase the 'educational bang' we are getting for our buck. More worrying than this, they caution that improving our education system in the future will require much more than expanding the knowledge-base in research institutions or individual clusters or locations. We need to ensure that when there is information that teachers and heads deserve to have, it gets to them all and supports their practice.

The questions at the heart of this paper are very simple: How can we guarantee that evidence and knowledge of effective practice actually make an impact on educational outcomes? How can we ensure that information about what has worked well in other contexts or countries gets to the teachers and head teachers who can benefit from it? In its first year, the Education Endowment Foundation has spent over £12 million on projects which aim to strengthen knowledge of what works; over the next fifteen years we will spend at least £190 million more. But without some good solutions to these questions, the lasting impact of this spending will be negligible.

That is why I am delighted to introduce this paper, written by Professors Carol Campbell and Ben Levin from the University of Toronto. Carol and Ben are known for their work connecting evidence to educational policy and practice, including their academic work at the Ontario Institute for Studies in Education in Toronto and their former roles as Chief Research Officer and Deputy Minister for the Ontario Ministry of Education. Over the past decade Ontario has become one of the highest performing education systems in the world, and, as Carol and Ben describe below, improving the relationship between research and practice was one of the key factors behind this sustained improvement.

The paper is intended as an initial stimulus for discussion about knowledge mobilisation in education in England. As is made clear, successful knowledge mobilisation will require strong networks and dialogue between educators, researchers and mediators, and it is hoped that this paper will act as a starting point for such a dialogue.

This dialogue will begin at three Evidence in Action seminars organised by the EEF in Autumn 2012. The discussion and conclusions from these events will inform the EEF's own knowledge mobilisation strategy, as well as having wider relevance for the system as a whole and all of the actors involved; as I think this paper clearly shows, successful knowledge mobilisation must be a collective endeavour. ”

## EXECUTIVE SUMMARY

We have learned over several decades that research findings do not automatically inform or shape policy or practice, and that without specific efforts to strengthen the connections between schools and researchers, even the most powerful evidence will have only limited effect.

The purpose of this paper is to outline an approach to strengthening the mobilisation of knowledge in education in England. Successful mobilisation will ensure that findings emerging from the Education Endowment Foundation's work and elsewhere really do lead to improved practices and outcomes in disadvantaged contexts. It describes the features of an education system designed to use research in practice, summarises current barriers to doing so and concludes with some suggestions for improvement.

Our model of research use draws attention to the tripartite nature of knowledge mobilisation work, involving researchers, users of research, and intermediary organisations. A strong knowledge mobilisation plan will require attention to all three of these elements.

The English education context offers both positive elements and some significant challenges to an effort to increase knowledge mobilisation related to education disadvantage. On the positive side, England has been a front-runner in demands to make research more useful and usable for education practice and policy. However, alongside improvements, there remain a number of barriers. Educators may lack time, resources, skills, and individual and institutional supports for meaningfully engaging with research and more attention has been paid to research production than to a systemic approach embedded in routines, behaviours and practices within and across education organisations;

We suggest that work in England should focus on two areas: **1.** Developing stronger networks *among* and *between* educators, research and intermediary organisations; **2.** Developing capacity *within* schools to find, understand, share and act on research. This capacity may be improved through training to improve skills, or through institutional changes which create the time or resources for schools to undertake these activities.

## INTRODUCTION: RESEARCH USE AND KNOWLEDGE MOBILISATION IN EDUCATION

In every field there is increasing interest in ensuring that what is learned from research actually influences practice. A more educated population, media attention and government interest in efficient use of resources are among the factors driving this increased demand for research to matter. In addition, everyone involved in the education system, most importantly pupils themselves, stand to benefit if schools are able to make better use of information about what teaching approaches and learning strategies are likely to be most effective.

However, despite these imperatives, a considerable body of evidence shows that the seemingly simple objective of putting knowledge to work is in fact very difficult to attain. For all kinds of reasons, it is still difficult to change organisational practices to be consistent with research knowledge, even when the lessons of research are strong and clear. What we have learned from several decades of research on this question is that research findings do not automatically inform or shape policy or practice, and that without specific efforts to strengthen those connections, even the most powerful research evidence will have only limited effect.

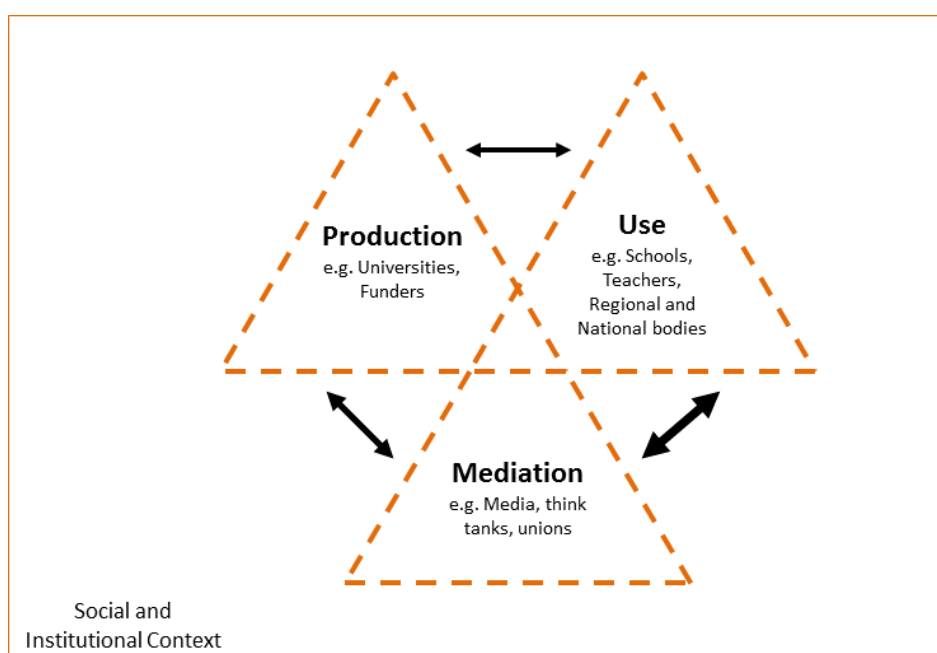
A good example is smoking and health. It took more than 40 years from the first strong evidence of the ill effects of smoking to the point where there were serious measures taken (still not serious enough in the view of many health advocates) to limit and reduce smoking. Similarly, though it has long been known that regular exercise and a good diet have powerful effects on health, large numbers of people do not practice either of these.

Likewise in education, it can currently take decades for research finding to reach the frontline, as Kevan made clear in his foreword.

This paper has four parts. First, it outlines a framework for thinking about knowledge mobilisation in education<sup>i</sup> – the interactive processes of developing and connecting knowledge from research and practice to drive improvement. Second, it describes the features of an education system well-placed to use research in practice. Third, it considers how England currently matches up to this ‘ideal’ system, and identifies some of the barriers which may prevent the ideal becoming a reality. Finally it outlines some possibilities for progress.

## WHAT WOULD EFFECTIVE KNOWLEDGE MOBILISATION IN EDUCATION INVOLVE?

Our simple model of knowledge mobilisation<sup>ii</sup> is shown below:



The model draws our attention to the tripartite nature of knowledge mobilisation work, involving individuals and organisations who are researchers, users of research and, importantly, intermediaries. A strong knowledge mobilisation plan will require attention to all three of these elements.

The model highlights:

- that all parties interact with one another (though some interactions may be stronger than others, as indicated by line thickness);
- that these interactions work both ways, meaning that knowledge mobilisation is about practitioners informing research as well as research informing practice;
- that social and institutional context must be considered when developing knowledge mobilisation strategies;
- that the different knowledge mobilisation roles are not mutually exclusive and many people and organisations will be involved in more than one function.

As a starting point, we propose four key dimensions of *capacity* are required for the use of research to improve education practices and student outcomes. These components are the capacities to *find*, *understand*, *share* and *act* on research evidence:

**Find:** A starting point for research use is the capacity to access available research. This includes the capacity to identify a topic, problem or question for investigation, to begin a process of inquiry to find evidence about that topic, to know where to search for relevant research, to be able to access identified research and to review the materials found.

**Understand:** Effective use involves not only accessing research, but also understanding and evaluating research evidence. This requires 'research and data literacy' capacities to be able to read, review and understand research reports and findings, including the capacity to assess the quality and appropriateness of a research design, methods, and findings, to critique research, to synthesise and summarise across bodies of research, and to evaluate the potential implications and utility of the research evidence for a given context.

**Share:** Research use and knowledge mobilisation involve interpersonal and social processes to share and spread evidence. This includes the capacity to communicate clearly research findings and implications, to connect with and across groups of people and organisations to spread research and professional knowledge, to build research understanding and use into daily practices and organisational routines, and to develop networks for sharing learning and developing practice.

**Act on:** Research use requires the capacity to take action informed by evidence. Concepts of research-informed and evidence-informed decision-making suggest the importance of using and acting on evidence in education policies and practices. At the individual level, research can inform changes in knowledge, skills, ideas, behaviours and practices. At the organisational level of schools and at the system levels of networks of schools, local authorities and national agencies, research can inform larger changes in policy and practice.

Each of the three parties involved in knowledge mobilisation (researchers, mediators and educators) must make a contribution to each capacity. An important question, however, is *how much* of a role each party should play in each capacity and what should these roles involve? To what extent should schools "reach backward" to the research in terms of finding and assessing research? To what extent should researchers "reach forward" towards educators in terms of explaining their research and ensuring that research based activity has high-fidelity? How can mediators of various kinds help this process?

In addition, we must ask whether the balance of responsibility should change depending on the *type* of knowledge which needs to be mobilised? Do some of the types of knowledge in Kevan's foreword require different strategies to make the journey between research to practice? Are there particular vehicles which should be used to get well-evidences programmes or practices to other locations?

Rather than the direct, one-dimensional, top-down notion of ‘applying’ research, our approach suggests an interactive, multi-dimensional and flexible process where research – along with other evidence and experience – can be developed, adapted and contextualised to inform action.

Our approach also draws attention to building capacity at the individual (e.g. teacher, school leader), organisational (e.g. school) and system (e.g. national agencies and organisations) levels. To date, the majority of attention has been on individual research use, for example ‘teacher-as-researcher’ or practitioner focused research briefs. While these have a role, focusing only on the individual ‘user’ is inadequate for depth, spread and sustainability of long-lasting changes in practice. It is vitally important to develop both collective and organisational capacity to spread use of evidence about effective practices and to challenge educational disadvantage.

Figure 1 illustrates what an education system with highly effective knowledge mobilisation might look like across the four dimensions of knowledge mobilisation capacity. The system outlined should be seen as a starting point for discussion, rather than the only way a system could achieve effective knowledge mobilisation, or a comprehensive account of all of elements which may be required.

**Figure 1 – Effective knowledge mobilisation requires collaboration**

	<b>Researchers</b>	<b>Mediators</b>	<b>Practitioners</b>
<b>Find</b>	<p>Research is made publicly available and not confined to peer-reviewed journals.</p> <p>Attention is paid to how results will be made accessible at all stages of the research process.</p>	<p>Research synthesised and summarised in one place and made freely available.</p> <p>Research findings are included in professional resources and materials.</p>	<p>Teachers and school leaders have the skills to identify research needs and find relevant research resources.</p> <p>Teachers and school leaders have the time and resources to look at research, perhaps with a member of staff designated the ‘knowledge lead’.</p>
<b>Understand</b>	<p>Research written in an accessible form without jargon.</p> <p>The implications of research for practice are clearly outlined.</p>	<p>Implications of research for practice are clearly explained to teachers, parents, governors and the media. Findings are synthesised and inconsistencies are explained.</p> <p>Training and support for leaders using research is provided.</p>	<p>Initial teacher education and professional development equips teachers and leaders with the skills to be able to assess and interpret research.</p> <p>Time is allocated to discussing applications of research in all staff meetings.</p>
<b>Share</b>	<p>Researchers share their findings widely, including at conferences, training events, online and social media.</p> <p>Practitioners can influence research agendas and approaches.</p>	<p>Local and national organisations, including charities, unions, the media, academy chains and local authorities share evidence.</p> <p>Mediators ensure that lessons from research travel between schools and across the education system.</p>	<p>Experiences with research can be shared between and within schools (e.g. between departments).</p> <p>Staff have time to attend external events and have time to share and embed knowledge on return.</p>
<b>Act</b>	<p>Research makes explicit its implications for practice, what the pitfalls may be, and which elements should (and should not) be adapted.</p>	<p>Benefits of using research evidence are clearly explained to different teachers, parents, governors.</p> <p>Schools are supported when embedding research.</p> <p>Examples of school and classroom approaches to acting on research are identified and shared.</p>	<p>Schools develop a culture and practices that value, demand and act on research in their work.</p> <p>Schools have the freedom to make research-based decisions.</p> <p>Staff have time and resources necessary to embed research and evaluate impact in their own context</p>

It contains:

- A broad distribution of the capacities and skills necessary to find, understand, share, and act on research – among teachers, school leaders, and system actors and agencies, and organised processes to develop and maintain those skills through training and networking.
- Systems and processes that lead to effective knowledge mobilisation, such as organised ways of finding and analysing relevant research, processes to make educators aware of relevant findings, training materials to support adaptation and use of research, all of these embedded in staff roles at each level of the system.
- Initial teacher training which is clearly linked to the mobilisation of research knowledge, including the development of students' knowledge mobilisation skills.
- Leadership support for research use at all levels; leaders who value research, model and facilitate research use, and provide supports and resources.
- Schools and other organisations with infrastructures which support research – for example, there is someone who is identified as a 'research' or 'knowledge mobilisation' lead.
- Research use is embedded in the daily work of the organisation such as in staff meetings, professional learning communities and teacher collaboration.
- Local and national organisations, and strong links among these people and organisations, are supporting knowledge mobilisation so that there is good transfer of knowledge across the system as a whole.
- Tools across networks and throughout the education system are widely available to support knowledge mobilisation use so that these do not have to be re-invented in every school.

An excellent example of a system that does knowledge mobilisation well can be found in Gawande's (2007) description of the organisation of cystic fibrosis research and treatment in the United States. The 20-odd organisations who lead this work are closely connected with the research community and with each other. Improvements in treatment are rapidly shared and very quickly inform the practice of all the centres and the practitioners with whom they work. There is a constant search for better approaches but even more, a commitment to rapid dissemination and use of new knowledge, whether derived from formal research or from practitioner experience.

Our own experience in Ontario of developing a research and evaluation strategy suggests it is feasible over time to improve the culture and capacity for research use across an education system (Campbell and Fulford, 2009; Levin, 2008; <http://www.edu.gov.on.ca/eng/research/strategy.html>). Ontario has dramatically improved relationships between researchers and research users, the overall attitude to the use of research, and system wide capacity in that area.

Strategies to improve research production have included commissioning and conducting research on priority areas of education and supporting communication of research through plain-language briefs, summaries, webcasts and podcasts. Mediating processes included the establishment of a Knowledge Network for Applied Education Research ([www.knaer-recrae.ca](http://www.knaer-recrae.ca)) to support mobilisation of research on priority topics and to strengthen connections between researchers, educators and policy-makers. Other forums bringing together researchers, educators and policy-makers include an annual Ontario Education Research Symposium and an Ontario Education Research Panel with members from education and research communities as champions of research-practice connections. Strategies and supports to strengthen capacity for research use have also been put in place, such as the Managing Information for Student Achievement initiative and the work of the Institute of Education Leadership. Of particular importance, the use of research and evidence is embedded into policies and practices for school self-evaluation, professional learning and collaborative inquiry involving school leaders and teachers across Ontario. Over a period of several years these various steps have really changed the research climate in Ontario's school system.

## BARRIERS AND OPPORTUNITIES FOR KNOWLEDGE MOBILISATION IN ENGLAND

How well does England match up to the 'ideal' knowledge mobilisation system above and what are the barriers stopping us getting there?

The English education context offers both positive elements and some significant challenges to an effort to increase knowledge mobilisation related to education disadvantage.

On the positive side, England has been a front-runner in demands to make research more useful and usable for education practice and policy. Stemming from critiques in the 1990s of the quality and applicability of education research in England (e.g. Hillage *et al.* 1998) a large array of initiatives were undertaken to support research access and use by educators. Examples include research briefs and materials from the (then) Department for Education and Skills, the General Teaching Council for England (GTCE) and the National College for School Leadership (NCSL), and the development of initiatives such as the Teaching and Learning Research Programme (TLRP) and the Evidence for Policy and Practice Information (EPPI) Centre. A recent study of evidence informed policy making in 32 European countries identified 76 activities aimed at linking education research with policy making in the UK (Gough *et al.*, 2011). As a result, there are lots of individuals and organisations – schools, local authorities, universities, national agencies, independent research and education organisations, government and others – actively committed to and engaged with attempting to improve the supply, demand and use of evidence for more effective practices in education.

However, alongside improvements, there remain challenges. The many interesting initiatives in England have not led to an overarching and aligned strategic approach or system focus. The study of research-to-policy activities across Europe, including England, identified less than 4% of activities as having a system focus (Gough *et al.*, 2011); yet, such a system approach may be vital to for spreading sustainable improvement at scale.

The bulk of activity has been about research production and dissemination rather than actual support for use. At the local level for educators, research products are often overly generic without sufficient attention and supports to fully develop capacity to understand and act on such evidence in day-to-day practices and local contexts (Cordingley, 2007), as well as across organisations and systems.

Also, the landscape of education in England is changing rapidly. Several of the initiatives mentioned earlier have ended or are in the process of doing so, such as the GTCE and the TLRP; while several national agencies, such as NCSL, continue and new research use initiatives are being funded by the current Department for Education, almost all are operating with significantly reduced budgets.

In addition to these England specific challenges, many challenges to improving research use are universal. Put simply:

- Researchers may lack the interest or incentives to conduct applied work;
- Research may be inaccessible, inconsistent or insufficient to actually inform decisions or actions;
- Educators may lack time, resources, skills, and individual and institutional supports for meaningfully engaging with research and/or may prioritise their colleagues' views and own experiences over independent evidence;
- Capacity for actual research take up and use is weak throughout the education and children's services systems, particularly if attempting to go to scale beyond individuals and embed research use throughout organisations and systems;
- More attention has been paid to research production and individual users than to a systemic approach embedded in routines, behaviours and practices within and across education organisations;
- Intermediary processes and supports to develop such capacity are under-developed.

A final consideration in England is the highly – and increasingly – decentralised nature of the system. This decentralisation presents both opportunities and challenges for knowledge mobilisation. On the



one hand, increased school autonomy may provide new impetus for schools to seek out and embed evidence-based practice in order to increase attainment and efficiency, while simultaneously giving them the freedom to pursue these practices. On the other hand, the autonomy of individual schools may make it harder to bring research to bear on practice systemically and at scale. Intermediary governing bodies such as local authorities that play a strong knowledge dissemination role in other countries, may not continue have the same responsibilities or resources for education in England. Put bluntly, mobilising knowledge in 20,000 individual schools is not an easy task.

## WHAT TO DO?

A goal of improving knowledge mobilisation is to develop an education system that is both excellent and equitable. In order to overcome the barriers outlined above and move towards the proposed 'ideal system' in Figure 1, we suggest that work in England should focus on two areas: 1) Developing stronger networks *among* and *between* educators, research and intermediary organisations; 2) Developing capacity *within* schools to find, understand, share and act on research. This capacity may be improved through training to improve skills, or through institutional changes which create the time or resources for schools to undertake these activities.

Through collaborative work between EEF and other partners, strategies attempting to address both of these elements could be put in place in England with a relatively modest effort. A range of partners could be involved in this work, from individual schools, teaching schools, National Leaders of Education, Local Leaders of Education, universities, research organisations, private providers, and national agencies including the Department for Education, the National College for School Leadership, the teaching agency, and others. As well, national organisations of heads and teachers should be invited to be partners in this work.

Crucially, empirical evidence on what actual processes and supports are most effective for knowledge mobilisation, research use and impact for education practice and student outcomes is currently limited, although some is starting to emerge ([www.oise.utoronto.ca/rspe](http://www.oise.utoronto.ca/rspe)). As a result, it will be essential to evaluate the impact of knowledge mobilisation efforts with the same rigour as attempts to directly increase attainment.

### **Developing stronger networks among and between educators, researchers and mediators**

Networking people with related interests is well developed in England and provides an effective way to engage varied people and organisations in using knowledge mobilisation tools. A range of networks could be relevant, either looking generally at research use or focused on particular areas (such as a common interest in working with parents or operating tutoring programs). Knowledge mobilisation work could be done in the many existing networks in England (for example networks of schools or the networks of leaders created through the National College) as well as by creating new networks specifically focused on knowledge mobilisation work related to challenging educational disadvantage. Networks can be created or supported through various mechanisms including communications vehicles such as newsletters, events such as conferences or professional development events, or online mechanisms such as e-bulletins or social media. The goal would be to provide multiple opportunities for anyone with an interest in knowledge mobilisation in this field to connect with other persons or organisations with similar interests.

Creating networks is, as we know, not just a matter of bringing people together but of organising and supporting their work together so that it focuses on real tasks and brings real action and learning.

### **Building capacity within schools**

In general the skills to assess and apply research require further development among educators, whose training generally does not focus in these areas. Helping people get better at finding, understanding, sharing and acting on research will require dedicated training efforts of various kinds. The target groups for training would include teachers and school leaders primarily, but might also extend to governors, pupils, and parents.

Potential areas for training could include such areas as:

- Clarifying and defining research needs, topics and questions
- Finding relevant research
- Assessing the quality of research studies
- Leading the use of research within schools
- Creating professional learning tools and systems to apply research findings
- Working with intermediary bodies to share research findings
- Organising knowledge mobilisation work in schools or school systems

The training could be provided, using some common core materials, by a range of organisations, from universities to national agencies or teaching unions. Capacity building tools and resources could be developed and made available for online and on-demand use, as well as for in-person training and development opportunities.

Consideration should be given to developing one or more certifications in this area. Certification provides a formal recognition that extends beyond individual agencies and will heighten the profile of the entire field. A certification program could be subsidised or self-financing through fees depending on the wishes of sponsors.

As noted earlier, however, training alone will not be a sufficient condition for knowledge mobilisation; organisational commitment is also essential. Yet institutional supports in education for knowledge mobilisation are generally weak. To improve this situation, tools and resources could be developed to help organisations (schools, networks, national agencies) improve their knowledge mobilisation focus and capacity. These steps and tools include: job descriptions for people who would be knowledge mobilisation leaders in schools or networks; surveys to measure current knowledge mobilisation activity; descriptions of systematic processes to find, understand, share and apply research; sample policy documents for schools that support knowledge mobilisation; examples of school improvement goals linked to research use; promising practices of approaches to integrating research into school routines such as staff meetings, professional collaboration and school communications; and so on. In many cases such tools already exist, so they would only require adaptation to the English context. Once found or developed, these tools and resources should be distributed broadly, including through the training and network systems. On-going work may be needed to support their adoption and to assess their impact.

### KEY QUESTIONS

Key questions for discussion at the Autumn seminars will be:

- a) How does England currently match up to the 'ideal' system proposed in Figure 1?**
- b) What more could researchers, mediators and users do to overcome the barriers to knowledge mobilisation in England?**
- c) What knowledge mobilisation strategies would be required to bridge the gaps between educational knowledge and educational practice in the foreword?**
- d) What promising ideas could be tested to move us closer to the system we want to have?**

### NOTES

The Education Endowment Foundation (EEF) is an independent grant-making charity dedicated to raising the attainment of disadvantaged pupils in English primary and secondary schools by building and sharing evidence of what is effective to improve learning. Founded by in 2011 by the Sutton Trust in partnership with Impetus Trust, the EEF was set up with an initial £125m grant from the Department for Education. With investment and fundraising income, the EEF intends to award over £200m to support its aims over the next 15 years.

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<sup>i</sup> Although many terms are used to express this connection between research and practice, our preferred term is "knowledge mobilisation" because it best embodies the idea that the use of knowledge is a social process, not just an intellectual task, and as such is multidirectional, not just a matter of moving information from those that know to those that do not. At the same time, "mobilisation" implies effort and direction, not just random interaction.

<sup>ii</sup> In this short paper we do not lay out a theory of knowledge mobilisation; fuller discussion of these issues can be found in Levin 2010, 2011; Cooper, Levin and Campbell, 2009; and Nutley, Walter & Davies, 2007, plus the many sources cited in those papers.