Educational research forum:
a future agenda for educational research

Held on 26 November 2019

Forum note

Contents

Co-chairs' introduction

We were delighted to be asked to lead, *educational research forum: a future agenda for educational research.* Throughout, the event was a joint endeavour between The British Academy and the Royal Society.

Above:
Professor Ulrike Tillmann FRS (top) and Professor Richard Hudson FBA (bottom), Co-chairs of the educational research forum.

Education touches every part of the social, cultural and economic lives of our communities and the individuals who live in them. Well designed and delivered educational research, deployed effectively in practice and in policy decision-making, has the potential to change lives for the better.

The Academies recognise that maximising the positive impact of educational research can only be achieved through dynamic partnerships across wide-ranging fields of thought and intellectual exploration. Together, the Academies act as the voice of the humanities and social sciences and as a fellowship of many of the world's leading scientists.

The forum was a direct result of the *Harnessing Educational Research report*, published jointly by the Academies in October 2018. That report emphasised:

- The strength and importance of educational research within the UK;

- The opportunities offered by better coordination and collaboration within the educational research ecosystem; and

- The need to break-down barriers between the research, policy and practice communities in developing and using research outcomes.

In seeking to build on that report, the forum sought to:

- Connect key communities in educational research to make lasting networks; and

- Develop a future research agenda for educational research.

The event brought together around 100 participants representing teaching, research and policy communities, along with businesses, funding organisations, regulators and inspectorates from across the UK. The forum design offered time and space for conversations and captured the voices of participants, the insights and ideas and the wealth of their experience, knowledge and expertise.

We witnessed passion and engagement from all those present. We want the momentum generated by the event to continue. Inevitably, in reporting on the forum, it is not possible to do justice to all the themes, observations and possibilities that the many conversations taking place gave rise to. Instead, in presenting this note, we offer a means by which those discussions can be taken forward.

We urge you, as participants at the forum to respond to the suggested steps for future action proposed and key findings in this note which aim to ensure that educational research in the UK remains of the highest class and deeply relevant to the communities that it serves.

About the forum

The British Academy and the Royal Society hosted a joint forum on 26 November 2019 to explore shared challenges and opportunities in educational research.

The forum built on key recommendations in the *Harnessing educational research report*, published in October 2018. That report assessed the state of educational research about formal education in schools and colleges up to the age of 18 in the UK and its roles within the broader education ecosystem.

The academies established a Steering Group and a Working Group (see Appendix) to structure and steer the conversations of participants at the forum. The aims of the forum were:

- **The event**
  Bring together educational researchers, policy-makers and teaching practitioners to talk about shared challenges and opportunities in educational research;

- **Research agenda**
  Move towards a shared future research agenda which is jointly owned by the key communities in the ecosystem;

- **Mobilisation**
  Harness expertise and enthusiasm across communities to set in motion a step change in the way educational research is planned, coordinated and used in the UK; and

- **Legacy**
  Create a lasting legacy to enable future collaboration between educational researchers, policymakers and teaching practitioners.

Invitees to the forum were chosen to represent the diverse range of communities with an interest in educational research. The forum brought together over 100 teachers, educational researchers, policy-makers and other interested groups from across the UK. The forum was a semi-structured event, focused on interactivity and the dynamic participation of all attendees:

- The morning sessions invited participants to consider the strengths, opportunities for development and future potential of the educational research ecosystem (see pages 12 – 16); and

- The afternoon sessions gave participants the opportunity to develop ideas intended to make the educational research ecosystem more effective (see pages 17 – 19).

Purpose of the forum note

The British Academy and The Royal Society designed the educational research forum as a safe space for participants from across all communities to share perspectives and engage in innovative thinking.

The contents of this note do not represent the views of the two academies nor are they a consensus view of those who attended. The information gathered and ideas generated at the forum do, however, represent a valuable resource. The academies will use this note to take forward work aimed at enabling educational research to influence policy and changes to teaching and learning practices for the better.

The academies would like to give you, as a participant at the forum, the opportunity to validate the contents of the forum note through our online survey. In particular, the survey aims to explore whether you can hear your voice including:

• Which of the steps for future action (pages 17 – 19) would you like to see taken forward and why?

• To what extent you agree with the summary of key findings (page 20)?

• How you would like to work with others and with the academies in the future on educational research?

If you wish to provide comments on the note or make other comments about the forum, please go to: **forms.royalsociety.org/s/EducationResearch**

We are also keen to have more in-depth discussions with individuals or organisations represented at the forum. If you would like to participate in these, please provide contact details in responding to the online survey.

The closing date for replies to the survey is 1 July 2020.

Above: Participants at the Educational research forum.

Executive summary: a future agenda for educational research

Area 1

Bringing it all together: a shared vision for educational research

To influence practice and policy, practitioners, researchers and policy-makers need to come together around a shared vision and common goals for educational research. That involves building on existing connections and coordination to secure an effective, responsive and adaptive research ecosystem. We need to maintain and reinforce extensive stakeholder engagement to share perspectives around the goals of education and gain consensus around a long-term strategy for educational research.

To remain relevant, educational research must recognise the wide range of factors outside the classroom that affect learning outcomes. The ecosystem needs to create productive and sustainable research communities responding to diverse students' needs.

We can achieve a shared vision for educational research by:

- Establishing a coordinated community to develop priorities for educational research; and
- Working across a diverse range of stakeholders to take into account the social and local context in which teaching and learning takes place.

Above: Participants at the Educational research forum.

Area 2
An evidence base fit for the future

The UK has an international reputation for a vibrant educational research community. This is shown by the high quality submissions to the Research Excellence Framework, the wide variety of approaches being used by educational researchers and the increasingly sophisticated ways in which they are collecting and using data. To maintain this reputation, a strategic research structure should be in place to ensure the continuing flow of robust research into policy-making and at the level of education providers. Researchers must bring to bear a wide range of research methodologies and tools in tackling educational research questions.

Future educational research needs to understand, investigate and respond with answers and solutions to real world problems, for policy and in learning environments. Systematically mapping the evidence base would be a first step to using better existing knowledge.

We can meet future education evidence needs by putting in place:

- A more strategic approach and greater coordination, involving collaboration between funding bodies and wider stakeholder engagement, to inform educational research funding decisions; and

- Systems which measure the full range of outcomes that matter in terms of young people's development — including problem solving, critical thinking, cognitive function, learning disposition, creativity and happiness of pupils, as well as control factors (like social background).

Area 3
Transforming research partnerships

To make a vital difference to meaningful outcomes, educational research findings must inform, challenge and shape the broader education policy framework and delivery. That requires strong, committed partnerships between researchers, policy-makers, teaching practitioners and more widely across the education system.

Researchers must communicate better including making use of a variety of communication tools to make their evidence accessible to a wide range of audiences. Policy-makers who work closely with researchers and respond to the research evidence should use it to build education policy. Teachers are critical users of research and must be empowered to innovate within their own classroom situations. A collaborative model involving researchers working with practitioners and young people can focus research on the key issues of importance to learners.

We have to develop productive and sustainable inquiry communities through:

- More extensive working across institutions, professional fields, intellectual disciplines and communities in producing and using educational research;

- Fostering strategic partnerships between policy-makers and educational researchers and an active education policy community outside of government;

- Creating a research community model in which teaching practitioners and researchers work together throughout the research development and deployment process; and

- Enabling communities of teaching practitioners to conduct research alongside researchers and policy-makers.

Educational research: the current landscape

Professor John Leach
Director of the Institute of Childhood and Education, Leeds Trinity University

The *Harnessing educational research* report, jointly published by the British Academy and the Royal Society in October 2018, explored the challenges and opportunities for achieving greater impact for research in education policy and practice. Key findings were that:

- The health and efficacy of the ecosystem depends on efficient flows of people, funding and information (information meaning both data and insights and ideas);

- External political, economic and other environmental changes affect the ecosystem;

- Three groups needed to work together: teaching practitioners, policy-makers and educational researchers;

- Better connectivity was critical – the educational research ecosystem working as a whole.

One of the primary recommendations of the *Harnessing educational research* report was to create an Office for Educational Research to address the mismatch in demand and supply for educational research. Creating such an Office remains the central goal - but building formal structures and communities takes time.

Why educational research matters

Daisy Christodoulou

Director of Education, No More Marking

At its simplest, the purpose of educational research is to improve education. That includes improving basic skills and general attainment levels globally. Plenty of international studies show that even in developed countries, significant minorities lack the basic skills to participate in a modern economy.

Educational research can help through rigorously uncovering the root causes of learning, with a focus on the deep causes of learning, not the surface features.

Innovation has moved forward considerably in areas such as artificial intelligence and machine learning: for example, computers can now defeat humans at chess. But there has been less success in the way in which science, culture and intellectual development has improved the capabilities of humans. The question is whether, as a society, we want to find ways of improving human intelligence, or if we just want to replace it with machine intelligence.

Approaches to research in other fields: the health model

A common theme running throughout the forum discussions was the comparison between educational research and the model for medical research. In the 1990s, a National Health Service research and development programme was set up to focus on the priorities of the public service. It provided strategic research investment on long term and enduring health problems. The Department of Health became a core client of bioscience research. This required active investment in infrastructure to enable use of research and rigorous evaluation of what worked in practice.

Research rigour in the field of medicine enables developments in disease prevention, control and treatment through understanding the underlying sciences. The National Institute for Health and Care Excellence (NICE) acts as a trusted, authoritative voice on health issues. It operates as a mediating body between researchers and government. It presents objective summaries of cumulative research findings to inform policy decisions, shape the medical research agenda and offer solutions to policy problems.

Above: Participants at the Educational research forum.

The educational research landscape: where we are now and potential for the future

Area 1
Bringing it all together: a shared vision for educational research

To be effective in influencing practice and policy, effort should be made to bring together practitioners, researchers and policy-makers around a shared vision and common goals. This could be achieved through:

- Joint ownership of the research 'ecosystem' by the three stakeholder communities;

- Encouraging a vibrant, diverse and engaging culture in implementing and shaping the research agenda;

- Establishing a clear national strategy to prioritise and coordinate integrated research activities;

- Awareness and sensitivity to the social and political context within which research happens.

"We need to create a genuine inclusive vision, involving learners, parents, and different practitioners setting the research agenda."

Teaching practitioner

Ecosystem

Central to unlocking the potential of educational research is the existence of an effective, responsive and adaptive research ecosystem. That means balancing the interests of the three main communities within it: practitioners; policy-makers; and researchers. Together, those communities must act as a collective intelligence in continually appraising the education landscape and determining priorities for research that will increase understanding of the drivers of education outcomes, and how best to improve them.

The ecosystem needs to be well connected across a broad range of social policy areas that influence education. Through this network, the ecosystem should begin to explore a shared vision and values. It must reflect national, regional and local issues and the place at which education policy is decided and delivered. The ecosystem must be self-reflective and resilient in overcoming political and practical barriers to collaboration and ensuring the right incentives are in place to achieve change.

Productive and sustainable research communities

The ecosystem needs to create productive and sustainable research communities which can respond to diverse purposes and students' needs. This will ensure the ongoing vibrancy and relevance of educational research and that the best research outcomes are taken forward.

Open and responsive partnerships involving a diverse set of voices, especially those of young people and parents, need to be encouraged in developing research. Research communities will lead to research projects more grounded in real life situations and relevant to the needs of those they are designed to serve. Equally, a comprehensive stakeholder driven process would influence policy by examining the wider role of education in society and the priorities that arise from that for educational research.

Coordination

There should be extensive stakeholder involvement to move towards consensus around a long-term strategy for educational research. This will involve sharing and respecting different perspectives in order to strengthen collaboration and instil a sense of common direction. The strategy should take a holistic view of education, going beyond formal schooling. It should prioritise research addressing the key issues for policy and practice; formalise governance; help avoid duplication; and give scope for new ideas.

An evidence-based plan is required for the delivery of future funding, infrastructure and user integration needs for educational research. At the heart of educational research should be a trusted body charged with giving coherence to the constituent parts of the ecosystem. Such a body would focus on high level, strategic issues and sustaining networks across policy, practice and research. It would also promote and highlight high quality research and the societal benefits that this brings. Establishing such a body means urgently addressing the issues of how it would be owned, funded and organised.

Social and political context

Education takes place within a diverse and complex social and political context. Educational research must accept and reflect the fact that learning outcomes are affected by a wide range of factors going beyond what takes place in the classroom. That includes the local and regional context and deeper societal issues such as poverty, housing, employment and crime.

Practitioners and policy-makers must be able to respond to research that challenges existing approaches and practices. Additionally, policy-makers should be able to look beyond immediate political pressures to pursue long term policy goals through dedicated educational research programmes.

Area 2
An evidence base fit for the future

Maintaining the UK's international reputation for having a vibrant educational research community producing high quality evidence, requires:

- Mapping, understanding and deploying current educational research findings and outputs;

- Developing a progressive, forward looking research agenda, responding to diverse needs;

- Rigorously applying and refining a range of innovative research methodologies;

- Targeting resources to achieve scale, sustainability, long term vision and successful implementation of research projects meeting the needs of users;

- Ensuring that educational research communities have a diverse make-up, be outward looking and foster effective partnerships.

Current research base

Educational research in the UK is a vibrant field which keeps educational thought alive. It is academically rigorous, transparent, of a high quality and has a strong international reputation. Some 66% of educational research submissions to the Research Excellence Framework 2014 were 'world leading' or 'internationally excellent' overall. A variety of research approaches, insights and methods generate a wealth of evidence. Researchers are refining the way in which they collect and use information through large quantitative datasets, diagnostics, long term programmes and longitudinal and cohort studies. Educational research identifies gaps in understanding, addresses these through relevant methodologies and responds to the wider social context, such as the mental health and wellbeing agenda.

There are, however, opportunities to better use educational research evidence. A first step is to systematically map the existing evidence base at the national and local levels to create a shared historical understanding and "research memory." This will ensure the most appropriate research findings influence policy and practice, the field can progress by building on previous work and that future research needs are more strategically assigned.

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"We have to find a way of successfully bringing together the education community to drive the research agenda, avoid duplication and deliver findings that are most helpful in informing policy and practice."

Policy-maker

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Future research agenda

Relevant future educational research needs to understand, investigate and respond with answers and solutions to real world problems, for policy and in learning environments. Research must maintain a long-term focus, while flexibly responding to research needs as they emerge. Areas seen as potential future educational research priorities include:

- Wicked problems – those which are deeply embedded and require complex, multi-agency or cross-societal responses;

- Broader society – interaction with wider policy and social issues, such as climate change;

- Pedagogy – especially in subject specific areas (in addition to English and mathematics) and post 16 teaching environments;

- Systems research – analysis of the ecosystem itself, measurement models, impact and knowledge mobilisation;

- Beyond the curriculum – looking at areas such as creativity and wellbeing;

- Cross-disciplinary opportunities – for instance, using insights from neuroscience to teach languages;

- Disruptive challenges – such as artificial intelligence.

Research approaches, tools, methodologies and measurement

A wide range of research methodologies should be brought to bear in tackling educational research questions. Randomised controlled trials might be more extensively deployed, while recognising the greater range and complexity of outcomes in education compared to other fields such as medicine. Broader definitions of research might value 'close to practice research' such as 'action research', explicitly framed to address practitioner needs.

Greater emphasis can be placed on deep learning from systematic review, replication, trial and piloting of existing evidence leading to the development of stronger causal models. Unintended consequences from interventions should be more thoroughly investigated. Technology can be better deployed to capture data and outcomes over time. Audio, video and social media outputs can provide compelling narratives on how interventions have worked.

Sustainable research: achieving long term impact

Educational research needs funding streams which are transparent, sufficient, equitable and effectively targeted. This requires greater communication and coordination between funding bodies, including local and regional funding partners. Mechanisms driving funding decisions, such as the Research Excellence Framework, must include incentives and pathways for research implementation.

A strategic research structure should be in place to ensure the continuing flow of evidence based thinking into policymaking and at the learning provider level. Capacity must be built to enable collaborative and multidisciplinary research projects looking at scale and at cumulative and quantitative impacts. This should include extended longitudinal, cohort studies with large population samples and greater coordination of smaller studies, including action research involving practitioners.

Above: Participant at the Educational research forum.

Educational researchers – a diverse and outward looking profession

There is a need to secure the future pipeline of educational researchers in the UK through support and development. This will require a rigorous system of training and, specifically, schemes to increase supply of doctoral researchers and deepen research literacy. Education is located at the intersection of a wide range of social and intellectual fields. Understanding from all of these can provide a rich picture to enhance educational outcomes. To establish more innovative, joined up approaches to research challenges, actions might involve:

- establishing cross discipline and inter-departmental partnerships and programmes;

- evolving a more mature understanding of the contribution of the different natural scientific fields, social sciences, arts and humanities;

- effective interdisciplinary funding, potentially through a body specifically charged with identifying and addressing gaps in funding boundaries;

- incentivising interdisciplinary recruitment, partnerships and publication by researchers.

Area 3

Transforming research partnerships

To make a vital difference to real world outcomes, educational research findings must inform, challenge and shape the broader education policy framework and delivery. That requires strong, committed partnerships between researchers, policy-makers, teaching practitioners and more widely across the education system. Productive and sustainable inquiry communities involve:

- Policy-makers articulating and participating in a long-term research agenda delivered with researchers and teaching practitioners;

- Researchers communicating their research findings through a multiplicity of channels designed to serve the needs of users of research;

- Dialogue with researchers so that teachers are able to identify areas that they feel research could address;

- Finding ways to enable teachers and school leaders to engage with robust research findings that address their pupils' needs throughout their careers, including through high quality professional development.

Research that influences policy

Education policy needs to be built on policy-makers working closely with researchers to understand and respond to the research evidence. There should be cross-departmental collaboration in setting and articulating long term research needs. Equally, researchers need to recognise the challenges for policy-makers in utilising evidence. That includes the time and budgetary constraints within which policy-makers often work and the problems of trying to get to grips with the sheer volume of evidence that is produced, as well as the political realities. Researchers should proactively assist policy-makers through synthesis and distillation of the wide ranging evidence available and its relative strengths and challenges.
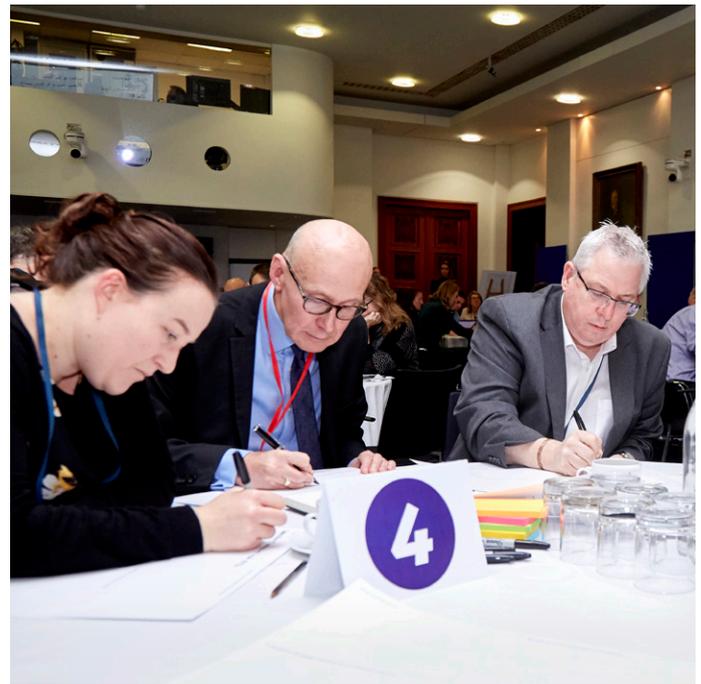
Above: Participants at the Educational research forum.

"Partnerships are about more connectedness (better listening) between researchers, policy-makers and practitioners..."

Researcher

Communication – making research accessible to users

Researchers need to communicate their research findings and evidence to all interested parties. That means both working through and with research intermediaries and mediators and using multiple outputs:

- Crisp, accurate and robust reports with clear summations linking evidence to opportunities to address real policy or learning challenges;

- Innovative ways of synthesising or systematically reviewing evidence drawn from a range of disciplines and using different methodologies;

- Open publishing and transparency about what educational research is taking place;

- Explaining the constraints and limitations of evidence findings;

- Social media, such as blogs and Twitter; and

- Regional hubs for disseminating research or, ultimately, an evidence foundation.

Research that improves practice

A collaborative model involving practitioners, learners and parents would focus research on the key issues of importance to learners. This would ensure a clear pathway from research production through to implementation. An infrastructure needs to be developed to allow research findings to be translated into action. Research also needs to investigate the process of deploying research interventions into the classroom and understand why interventions are effective in certain situations, but not others.

Lasting partnerships might result from face to face support at the local level in implementing research in academic-user communities of practice. Secondment exchanges between teachers and researchers would enable sharing and development of professional expertise. Schools could have "researchers in residence" to highlight relevant research being undertaken. Similarly, teachers could actively evaluate research and feedback to researchers on how conclusions had worked in practice.

Teachers and practitioners: a research engaged profession

Teachers must be recognised as critical users of research with the agency and empowerment to innovate within their own classroom situations. This requires ensuring that teachers have both the time and skills to assess, evaluate and deploy relevant research. There should be an expectation that teachers will engage with research throughout their careers (during initial teacher training; in the early career framework; and continuing professional development). Masters level qualification or the status of researcher teacher should become more widespread.

The process of engaging with research is, in itself, valuable in developing teachers. Through research, practitioners can seek to discover and deploy practical applications, such as changes in pedagogic practice, in the classroom. Intensive involvement with research can raise the status of teachers in schools and other education environments. It can help create stability, self-worth and professionalism for teachers.

Above: Participants at the Educational research forum.

Educational research: potential steps for future action

Jointly identifying shared priorities

Idea 1
Educational research ecosystem – identifying needs and prioritising topics

Establishment of a coordinated community to develop priorities for educational research. The goal should be to create networks allowing co-design of the overall approach to educational research priorities and individual projects. Prioritising educational research means asking fundamental questions about the purpose of education policy. There should be an emphasis on the curiosity of teachers and students in determining research questions and the way to approach them.

Idea 2
Connecting educational research on local and wider social issues

Working across a diverse range of stakeholders (including students, parents, community organisations and employers). There would be an understanding that educational research should take into account the wider social context in which learning takes place and which affects outcomes for pupils. Research would be co-created by researchers and local partners using a variety of complementary research approaches.

Benefits

- An independent, authoritative outlook on educational research issues, able to command respect and take a long term view on cumulative research findings.

- Consensus on educational research priorities. This would extend across stakeholder groups, maintain close government involvement and get cross-party support.

- Consistent dialogue between schools, teachers and researchers. Research design would be systematic and extend across a broad range of disciplines.

- Engagement of all those with a stake in education (including children and parents; early learning, further and higher educational establishments; the local community and employers).

Challenges

- 'Trusted brokers' are needed, such as the National Academies, to facilitate sustained engagement with stakeholders.

- Time, funding and recognition through continuing professional development for teachers to engage with the process.

- Policy-makers articulating the outcomes they seek over the long term for pupils, wider society and the economy as well as the timing, financial and other constraints within which they work.

- Political context may constrain the licence to explore sensitive social issues and long term wicked problems and give rise to tensions in the delicate balance between national education oversight and local provision.

NEXT STEPS

Short term
Establish a national body with strategic oversight of the broader educational research landscape. Government should be supportive of this body, but it must be independent and have transparency in how representatives are appointed. The body would need to be mandated and equipped to put forward far reaching questions about education and the social and local context within which it is delivered.

Medium term
Ensuring that the full range of stakeholder and community voices are heard in deciding educational research priorities, focussing on practitioners (and the wider school environment, including pupils). This would establish the principle of a self-improving system, determining research questions and acting on research outputs.

Long term
An internationally grounded, open and transparent process with a developed 10 year plan on educational research priorities extending beyond political cycles.

Focusing on what matters in educational research

Idea 3
Measuring what matters

Assessing from first principles what is worth measuring in educational research. Alongside examination performance and school attendance, this will include problem solving, critical thinking, cognitive function, learning disposition, creativity and happiness of pupils, as well as control factors (like social background). Increased depth, scale and length of studies will be needed together with a range of interdisciplinary measurement tools (both quantitative and qualitative).

Idea 4
Identifying funding priorities to improve the educational research ecosystem

A more strategic approach and coordination to inform educational research funding decisions. This will require collaboration between funding bodies and wider stakeholder engagement to understand the full range of research that already exists or is underway and identify synergies and gaps. A broad range of research methods should be deployed adapted to specific research goals. Analysis of how research is communicated should also be undertaken to ensure evidence is disseminated to achieve the best effect.

Benefits

- An in-depth assessment of the goals of measurement would confirm that the educational research ecosystem was firmly rooted in an evidence-based paradigm.

- By defining the most critical questions for educational research, it would enable targeting of resources and research funding and enable initiatives on a larger scale.

- Prioritisation would improve collaboration across the education system and partners and would lead to the creation of entirely new problem-centred research networks.

- Mechanisms would evolve for safe sharing of data and enhancing open access to educational research conclusions.

Challenges

- It will be difficult to achieve consensus on the principal goals of education to be assessed. Many voices will have to be taken into account (children, parents, politicians, employers – as well as practitioners and researchers from across disciplines).

- Causal outcomes from particular interventions are not easy to identify in the way that certain natural science disciplines can be measured, due to the large number of uncontrollable variables, and data on the full range of key outcomes from education is currently limited.

- More innovative measurement methods may be hard to undertake at scale, replicate or apply in a generalised way to other learning situations.

- Working across broad ranging social contexts leads to issues of scope and complexity which may increase costs for the educational research ecosystem.

NEXT STEPS

Short term
Take the necessary administrative, financing and governance steps to establish a coordinating body (office or centre) to oversee and coordinate the necessary actions. Set in train an open process bringing together a broad range of stakeholder voices to gain political consensus around financing priorities and what is important to measure and, as critically, why.

Medium term
Greater time and opportunity for all communities (teachers, students, politicians and other stakeholders) to talk, think and agree priorities and direction. A particular need is to invest in teachers to become more research engaged.

Long term
Strategic approach to measurement and evaluation of research outcomes. This might include the creation of 'grand challenges' educational research funds with collaborative objectives. Change the culture in educational institutions and among teaching practitioners through the use of evidence to shape the ways of working in learning environments.

Establishing productive and sustainable communities

Idea 5
Systematic approach to greater collaboration
Working more extensively across institutions, professional fields, intellectual disciplines and communities in producing and using educational research. This means widening the types of disciplines and extending the range of stakeholders actively involved in the research effort.

Idea 6
Mechanisms to best support getting research used in policy
Fostering strategic partnerships between policy-makers and educational researchers. This involves creating an active education policy community outside of government able to communicate in an effective and a timely way and interchange openly with policy-makers to meet their needs.

Idea 7
Mechanisms to best support getting research used in practice
A research community model in which teaching practitioners and researchers work together throughout the research development and deployment process. This will result in the co-creation of resources by researchers and teachers for a specific purpose.

Idea 8
Engaging teachers in research as producers and users of research
Communities of teaching practitioners conducting research alongside researchers and policy-makers. Researchers may spend considerable time developing close relationships with those in schools (senior leadership teams, teachers, teaching assistants) to frame research questions.

Benefits
- Research produced will have greater impact: It will answer the real research needs of a wider range of stakeholders involved in its design and be shared more widely.

- Collaborative research can explore broader societal and individual needs and issues, such as barriers to social participation and resilience.

- Interchange between the communities of ideas, knowledge and potential applications of research can lead to strategic research investment on long term enduring educational issues.

Challenges
- Conflicting priorities and timelines for policy-makers who would need the opportunity to be more reflective and exploratory in the educational research with which they engage;

- Would involve a substantial change in practice and culture for both teachers and researchers, at the organisational, group and individual levels. Motivation and incentives to teachers will need to include giving them the time to engage with the evidence process;

- Maintaining the quality of research generated, including meeting the differing communication and publication expectations of policy-makers and scientific and professional journals.

NEXT STEPS

Short term
Create mechanisms to decide research priorities based on policy and practice needs. Supporting schools to focus on engagement with educational research. Researchers cultivating regular contacts with policy-makers. Structured conferences involving researchers, practitioners and policy-makers.

Medium term
Put in place the necessary research infrastructure (training, governance, knowledge sharing, databases of expertise). Co-designed research programmes (involving practitioners and pupils). Looking at other professions (such as health, policing and social work) to understand how the interface between policy, practice and research works.

Long term
New forums for engagement between policy, practice and research. These would be supported by strategic, long term funding of research and development in education. Evidence informed practice would become embedded within teacher professional development.

Key findings

Area 1
Bringing it all together: a shared vision for educational research

A coordinating body on which teaching practitioners, policy-makers and researchers along with other stakeholders are represented would give visibility to the educational research community and focus research efforts.

We should create a diverse educational research community in which:

- Researchers, policy-makers and teaching practitioners jointly shape the research ecosystem; and

- Many voices (students, parents, employers and communities) help set research priorities.

Educational research takes place in a broad political and social context and must:

- View education as a continuous life process – not just an experience taking place in schools; and

- Reflect and respond to the wider social and local context within which learning takes place.

We should build a common purpose and direction for educational research through:

- Creating a strategy based on a shared vision and goals around which there is consensus; and

- Laying down a detailed plan for funding, infrastructure and innovation over the long-term.

Area 2
An evidence base fit for the future

The research profession must be diverse in nature, to reflect those communities it serves, and support an ongoing pipeline of future research talent.

We can make the most of educational research evidence through:

- Mapping and synthesising the existing evidence base to use better what we already know; and

- Directing more attention towards real world questions to which policy-makers or teachers need an answer.

We can take the most effective and targeted approach to educational research by:

- Creatively applying a diverse range of existing and new research tools and methodologies; and

- Taking a strategic approach to funding, infrastructure and priority setting.

We can generate the highest quality educational research by:

- Sharing perspectives from a wide range of social and intellectual disciplines and institutions; and

- Multidisciplinary collaboration at scale to look at cumulative and quantitative impacts.

Area 3
Transforming research partnerships

Partnerships between teaching practitioners, policy-makers and researchers are the main vehicles by which educational research can transform policy-making and teaching practice.

To ensure that policy is rooted in educational research, policy-makers should:

- Collaborate across departments and policy institutions to articulate long term education evidence needs; and

- Continually challenge existing policy assumptions with a wide range of evidence.

To ensure educational research is relevant to policy and practice, researchers must:

- Develop close working relationships with both policy-makers and practitioners; and

- Explain research through a wide range of communication tools meeting the needs of users.

Educational research can change teaching practice through research models which:

- Collaboratively involve teachers and students in the development and delivery of projects; and

- Recognise engagement with educational research findings as a core part of teaching careers.

Appendix: acknowledgements

Members of the forum Steering Group	
Miriam Davey	Chartered College of Teaching
Dr Bonny Hartley	University of Greenwich
Professor Richard Hudson FBA	University College London (co-chair)
Professor John Leach	Leeds Trinity University
Dr Alaster Smith	Department for Education
Professor Ulrike Tillmann FRS	University of Oxford (co-chair)
Carole Willis and Fiona Walker	National Foundation for Educational Research

Members of the forum Working Group	
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Dr Frances Downey	Senior Policy Adviser (Education), The Royal Society (until March 2019)
Dr Helen Harth	Senior Policy Adviser (Education), The Royal Society (from March 2019)
Dr Alaster Smith	Head of Research Knowledge and Engagement, Department for Education
Dr Adam Wright	Deputy Head of Policy (Higher Education and Skills), The British Academy
Emma Blunt	Project Coordinator, The Royal Society
Kelly Chaplin	Programme Coordinator, The Royal Society

The Royal Society

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- Promoting excellence in science
- Supporting international collaboration
- Demonstrating the importance of science to everyone

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