

# Section III. Towards a UK model for developing and mobilising research knowledge in education

## III. 1. Introduction

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SFRE's three major meetings were structured by the model of systemic knowledge management which derived from the OECD CERI experience – the framework described on page 11.

As consultation continued and the agenda unfolded we incrementally developed the model. We also began to foreground the development and mobilisation of knowledge, rather than simply its management.

SFRE consultations demonstrated both of the richness and variability of provision within the UK. There is some tension in this, for it became apparent that, whilst there are many examples of excellence in research development and mobilisation in education, there are also many spaces where provision is rudimentary or even absent. There are thus many opportunities to add value and to achieve more coherent provision.

## III.2. Conceptualising the model

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Set within the overall political and social context of each country, six elements of knowledge development and mobilisation are proposed:

**Origination and planning** – including the conditions and provision for the facilitation and prioritisation of research activity

**Creation and production** – focusing on both innovation and the completion of projects in respect of each major type of research

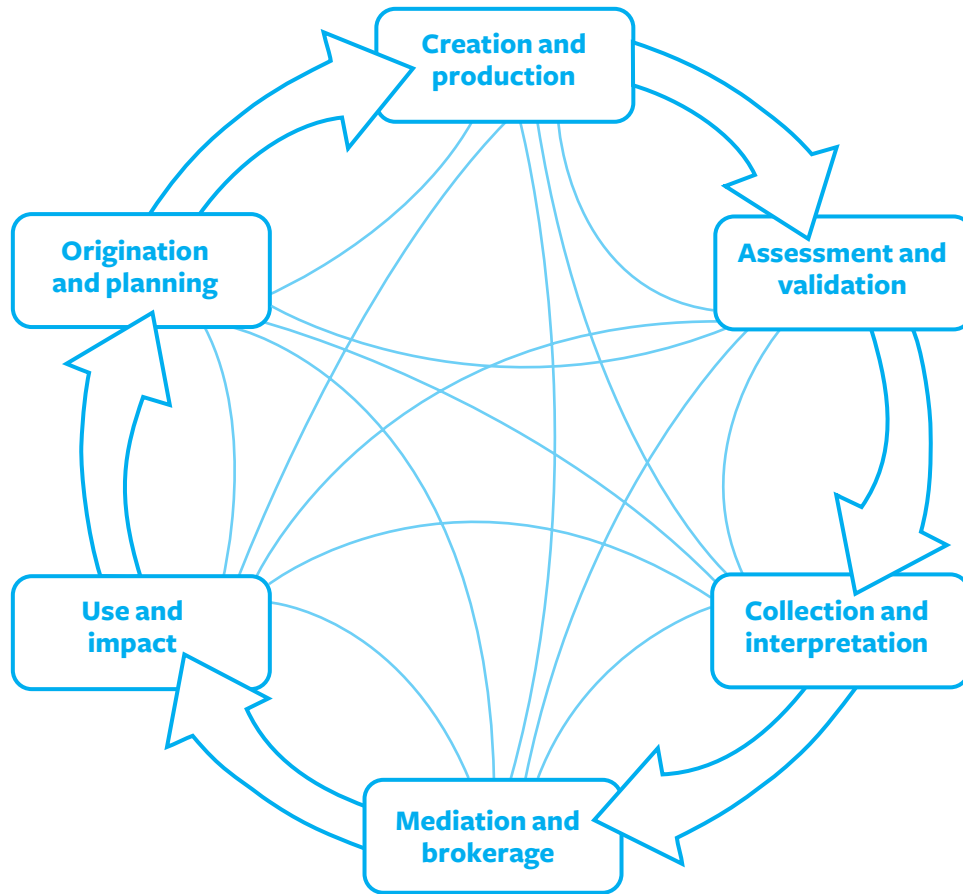
**Assessment and validation** – including peer judgement, user and beneficiary validation and the processes, criteria and indicators specific to each assessment context and type of research

**Collection and interpretation** – concerning issues such as the processing of new knowledge in libraries and databases, empirical review and theoretical synthesis

**Mediation and brokerage** – addressing the multifaceted promotional and communication strategies which enable the supply of and demand for evidence to be bridged

**Use and impact** – considering the ways in which knowledge is used, scaled up and takes effect within policy and practice

These elements can be represented in progressive, spiralling cycle which, in rational, system terms, might provide an idealised template for provision (Figure 4).



The representation is intended to provide an object for discussion, whilst also affirming the flexibility which is often evident. The Teaching and Learning Research Programme provided many examples of the complexity of processes of knowledge development and mobilisation. For instance, because of the high levels of user engagement deployed, the findings of some projects were very rapidly put to direct use – by-passing accumulation and mediation. Similarly, it was common to find iterative processes linking the research teams involved in the production of new knowledge and the brokerage agencies serving particular sectors. For example, Learning How to Learn was engaged with NCSL, National Strategies and other organisations through-out its existence. Projects on Widening Participation in HE were in regular touch with HEA throughout their development. Direct links can also be identified between the knowledge interpretation functions of organisations such as EPPI and IEE and those seeking to commission and plan new investments. Users wishing to apply research outcomes will often wish to check on the quality of the work, and may wish to do so directly, by-passing any brokerage agencies even though they may have brought the finding to their attention.

It was also absolutely apparent from discussions at SFRE that relationships between these elements are complex, dynamic and sometimes patchy.

The model thus combines a notion of logical and sequential progression, with a representation of the inevitable complexity of inter-relationships as professionals and organisations take initiatives and exercise judgement. As such, it is intended to be useful for conceptualising potential inter-relationships between elements, for posing questions and challenges. However, whilst it enables and provokes consideration of what an ‘ideal’ system might look like, it is not a description of such a reality. The complexity of the issues, interests and stakeholders precludes any such expectation.

It is also helpful to be clear that the tidiness of the model should not be taken to imply adoption by SFRE of a naive view of the knowledge generated by educational research and its systemic application. There are two dimensions of this – one on the epistemological status of social scientific evidence and the other concerning respective roles within democratic societies.

SFRE participants appeared to share a commitment to ‘evidence-informed’ decision-making in policy and practice. Indeed, bolder claims to be able to demonstrate ‘what works’ and offer ‘evidence-based’ policy and practice were rare. This suggests that there is a growing consensus which accepts the necessary modesty of scientists, of any sort, in generating categoric knowledge about the social world for application in diverse contexts. The obligation on researchers to produce evidence of the highest possible quality is in no way compromised by this realistic position.

Further, since values, interests and educational provision are fundamentally entwined in our democracies, a question arises concerning the appropriate role of the social scientist. In the SFRE conceptualisation presented here, the exercise of professional judgement by the politician, civil-servant or practitioner is seen as an integral part of the process of research application. Thus different forms of expertise and judgement are applied by those with particular roles, legitimacy and responsibility. Notwithstanding this, the application of evidence by practitioners and policy-makers remains an appropriate object of study in its own right.

In summary, SFRE’s idealised representation is not intended to describe some form of engineered machine in which pulling a lever will produce evidence-based excellence. The discussions at SFRE suggest that the issues and field are too complex for that. At the same time, it was felt that stakeholders in UK education could significantly improve the contribution they make to educational decision making through more open-minded collaboration, holistic awareness, strategic commitment and practical organisation in relation to the development and use of evidence.

In Section III, SFRE’s six-element model is used to structure an account of the major issues discussed at SFRE meeting. Each section concludes with explicit recommendations.

## III.3. Elements and recommendations

### A. Origination and planning

The political, social, economic and cultural conditions which facilitate the generation and valuing of evidence are fundamental. Deliberations at SFRE suggest that commitment in principle to the use of evidence in policy and practice decisions is strong within all UK countries. And yet neither the demand for nor supply of research evidence is consistent. As a result, it is clear that many decisions are taken without such consideration. Although the principled intention is well established, there is much further to go in practice.

SFRE itself was created as a constructive response to this situation with the hope that it might provide a way to affirm excellent provision where it does exist in the UK, whilst also sowing seeds for new initiatives, improved coherence and better value-for-money in the future.

The establishment of research priorities provides an example of the complexity which exists. In a rational, managed system, configuring research activity to address national targets and priorities would seem an obvious thing to do - and was, indeed, advocated by NERF. Such a strategy is particularly attractive to governments and, for example, recently structured the foci of AERS in Scotland and WERN in Wales. ESRC also attempts to respond to the contextual needs expressed by its government funders. A Funders' Forum, which existed in England from 2001 to 2005, provided opportunities for explicit discussion on this issue.

A counter argument, advanced particularly by some in the academic community, is that cutting edge research should be unconstrained. Too much central planning, it is argued, is bad for the competition of ideas which is the foundation of scientific progress, the 'open society' and democracy. Whilst recognising an element of vested interest here, these arguments were acknowledged by SFRE participants as being important for innovation. Additionally, the diversity, independence and variable capacity of funders need to be considered, for many have particular histories and commitments and there are different interpretations of appropriate procedures when commissioning research.

Meanwhile, the needs of practitioners, teacher associations, local government, companies and others who are directly engaged in the provision of services demand attention. For them, research priorities tend to focus on topics of more immediate relevance - behaviour, curriculum, work-load, cost-effectiveness. When articulated organisationally, such needs may be met but it remains hard to really tap into the authentic voice of practitioners. One particular difficulty is developing appropriate infrastructure for building user capacity to engage with and contribute to the research initiation and planning processes - from identifying research questions and through the many stages of commissioning. Further, despite compelling international evidence concerning the efficacy of teachers gathering evidence on and reflecting about their own practice, support for this activity is variable across sectors and in each country.

We thus face dilemmas in relation to the strengths and weaknesses of planned priority setting versus more open research processes led by curiosity and in responding to the direct needs and interests of providers and practitioners on the ground.

The dilemmas identified above begin to be resolved by more explicit recognition of the range of different traditions of research which have developed to meet particular

#### **ESRC's research priorities**

ESRC's research priorities fall within two categories: directed research and responsive research. Directed research includes ESRC's own challenges, identified in the strategic plan for 2009-2014 in line with the CRS key policy challenges, and the relevant RCUK interdisciplinary challenges. The 2009-2014 strategic plan of the ESRC identifies seven areas of strategic challenge for economic and social research: Global Economic Performance, Policy and Management; Health and Wellbeing; Understanding Individual Behaviour; New Technology, Innovation and Skills; Environment, Energy and Resilience; Security, Conflict and Justice; Social Diversity and Population Dynamics.

ESRC's strategy is to invest a significant proportion of its budget in large-scale activities such as centres, programmes, groups and networks in these priority areas. Most of these activities are interdisciplinary in nature and a large number are funded jointly with other research councils or other partner organisations. In addition to directed research, the ESRC also maintains a very strong commitment to funding innovative excellent research via its responsive research funding schemes (see ESRC delivery plan, updated April 2010).

[www.esrcsocietytoday.ac.uk](http://www.esrcsocietytoday.ac.uk)

#### **Scottish Government forum on demand for research**

In November 2009, Scottish Government (Education Analytical Services) convened a meeting bringing together the main public sector funders and stakeholders of educational research (including HMIE, LTS, SQA, SFC and local authorities) to establish how they currently engage with research and where their future research priorities lie. Discussions covered: the capacity in Scotland to provide research evidence at a reasonable cost and of reasonable quality; the scope for collaborative work within the public sector to meet evidence needs; and how the public sector could best engage with the suppliers of research evidence.

Building on the outcomes of this meeting, the Scottish Educational Research Association held an event on enabling research impact in February 2010. [www.scotland.gov.uk/Topics/Education](http://www.scotland.gov.uk/Topics/Education)  
[www.sera.ac.uk](http://www.sera.ac.uk)

purposes. Four main types of research were identified within SFRE: disciplinary research; applied research; development and evaluation; and practitioner enquiry – each of which was felt to be important for its particular purposes. Of course, many research activities range across such analytic boundaries. Taken as a whole, they enrich both understanding and application.

In terms of origination, planning and prioritisation of research topics, different forms of research have rather different requirements. Disciplinary research is primarily driven by academic innovation; development and evaluation by particular interventions; and practitioner enquiry by tangible classroom issues. The major challenge for national governments and other stakeholders relates to the prioritisation of applied research.

A two-level approach to the prioritisation of applied research might be considered.

First, conventionally, there will be issues of national priority which rise and fall depending on circumstances, consultation and political judgement. ESRC's 'research challenges' and deliberative mode funding initiatives reflect this context. Whilst such a model of priority-setting and funding provides good opportunities for research entrepreneurs, the accumulation of knowledge is not always well served and the lag between research commissioning and outcomes becoming available is a routine frustration.

Second therefore, there is a case for strategic prioritisation of longer term applied research investments on more enduring issues – from which rapid responses to immediate priorities could then be derived. The establishment of such issues is a conceptual challenge as well as a practical one, but the idea reflects the fact that many educational issues recur in prominence because of the structural challenges of educational provision. Some examples might be: how to enhance learner performance and opportunities; how to foster teacher expertise together with appropriate accountability; how to provide effective schools for all; how to frame curriculum and also enable learning; how to monitor system performance without distorting educational provision; how to deploy educational resources in the most cost effective ways; etc. The three research centres recently funded by DCSF are examples of relative long-term funding being provided on comparable topics. These centres should thus, in principle, be able to contribute to short-term priorities as well as taking a longer-term perspective on the issues on which they focus. In the USA, also accepting that some issues require long-term, cumulative study, the National Science Foundation has been developing the notion of 'cycles of innovation' to guide strategic commissioning.

There are examples of particular universities taking a lead on specific issues, and this could be taken further. For example, Bristol has a long-established focus on 'culture, learning and identity in organisations' and King's College, London has been a centre for studies of maths and science education for many years. Longer-term specialisation may also become more likely with the integration of education and social science research – and illustrated by the Centre for Effective Education at Queen's University, Belfast, and the Welsh Institute of Social & Economic Research, Data & Methods in Cardiff.

The funding of longitudinal studies was felt at SFRE to be particularly valuable because of the exceptional track record of such work in providing high quality evidence in relation to lifecourse experiences and outcomes. However, it was also regarded as being vulnerable to short-term decision making.

Practitioner research and enquiry is understood to have a significant role in enhancing professionalism and expertise but has hitherto suffered from considerable instability in funding from some national bodies. If the potential is to be realised of England's National Teacher Research Panel, of Northern Ireland's commitment to 'Teaching: the Reflective Profession', of the Chartered Teacher scheme in Scotland and of the Welsh Pedagogy Initiative, then teacher research must be fully integrated into stable and progressive professional development systems.

## **NIERF**

The Northern Ireland Educational Research Forum was established by the Department of Education in early 2008, in an effort to build links with the wider educational research community and to address the fragmentation and connectivity problems that exist in Northern Ireland with regard to educational research. Participants at the NIERF opening event recognised that each community, sector, department or organisation had its own set of priorities and methodologies which are fit for their own specific purpose(s). However, they also recognised the need to work towards a shared knowledge creation framework. Due to a variety of factors, such as change in personnel, the economic downturn and priorities over restructuring (the Education Skills Authority), the initial momentum associated with NIERF has been constrained during 2010. [www.deni.gov.uk](http://www.deni.gov.uk)

## **WERN**

A recent example of collaboration between all who share responsibility for educational research at country level was the Welsh Education Research Network (WERN). WERN was supported by the Welsh Assembly Government (WAG) via the Higher Education Funding Council in Wales (HEFCW), and the ESRC. This network was successful in building partnership between all HEIs in Wales to build capacity in education research. For example, in March 2009, the Director of DCELLS, the Chief Executive of HEFCW and representatives from all institutions spent a day in mid-Wales talking about the priorities for future education research development in Wales. WERN's funding ended in July 2009. [www.wern.ac.uk](http://www.wern.ac.uk)

## **DfE Research Centres**

The DfE (formerly DCSF) has identified a need for a strategic approach to developing the knowledge base in three distinct areas, where existing evidence is limited or fragmented, or which will particularly benefit from an integrated approach to analysis and understanding. To meet this they have established three new research centres to build on the valuable work of previous centres: childhood wellbeing; understanding behaviour change; and youth development and transitions. Each centre has been designed to deliver an integrated programme of research within their subject area, providing short term analysis/review and longer term projects. They work closely with policy and analytical officials in the Department, support both policy thinking and the development of evidence and understanding. The work of centres has England as its principal focus, but draws on international data and experience for comparative purposes and methodological expertise. [www.education.gov.uk/research](http://www.education.gov.uk/research)

Strategic thinking of this sort, whether for a shorter or longer time horizon, needs very careful consideration and, with overall scarcity of funding, there is a strong case for mutual awareness between funders. This is the argument for re-establishing a ‘Funders’ Forum’ or some other form of regular liaison to maximise the effectiveness of investments in each country and across the UK as a whole. Of course, such deliberation would need to be informed by those with relevant expertise, and close engagement with key stakeholders and constituencies could improve the legitimisation of priority-setting and commissioning processes for applied research.

In summary, SFRE participants agreed that the use of evidence to inform decision-making in policy and practice makes an essential contribution to the work of responsible policy-makers and practitioners within UK democracies. However, it was recognised that UK educational research originates and is planned in a wide range of relatively local conditions. Specific initiatives reflecting national priorities for applied research have an important place but would benefit from being related to and informed by longer term funding of work on underlying enduring issues.

## Recommendations

### Origination and planning

1. Governments and their agencies in each UK country should aim to support both responsive and prioritised research, recognising their complementarities in achieving both innovation and quality.
2. Strategic thinking about applied research should consider UK provision for long-term research on enduring issues as an effective way of providing evidence on immediate priorities, as well as enabling more sustained scientific development.
3. In establishing research priorities, there should be greater liaison between funders and stakeholders to improve the effectiveness and legitimacy of decisions.

### The Effective Provision of Pre-School Education project

EPPE is the first major European longitudinal study of a national sample of young children’s development (intellectual and social/behavioural) between the ages of three and seven years. To investigate the effects of pre-school education for three and four-year-olds, the EPPE team collected a wide range of information on over 3000 children, their parents, their home environments and the pre-school settings they attended. This work underpinned the Sure Start initiative in England and has been influential across the world. An extension, EPPE 3-11, followed the same children to the end of primary school (Key Stage 2, age 11) and explored the enduring impact of pre-school and early learning experiences. EPPSE 16+ follows the same group of students through their final year of compulsory school and into their post school educational, training and employment choices. <http://eppe.ioe.ac.uk>

## B. Creation and production

Discussion at SFRE II built on distinctions among several types of research which, despite definitional qualifications, were identified within SFRE: disciplinary research; applied research; development and evaluation; practitioner enquiry. Relationships between theory and practice, research and application are played out within all types of enquiry and they are each associated with particular communities of practice, networks, literatures, ways of working and forms of social organisation.

Disciplinary research is valued for its role at the cutting edge of international, specialist knowledge and the commitment of disciplinary experts to knowledge for its own sake and to the development of analytic tools was appreciated. However, it was noted at SFRE that many research questions in an applied and increasingly wide-ranging field like education called for multi-disciplinary collaboration and produced ‘imports’ of expertise to educational study. Going further, to inter-disciplinary synthesis, was recognised as being worthwhile, but even more challenging. In higher education, the creation and production of such work is vulnerable to significant distortion because of the high ascribed status of specialist knowledge. This generates perverse incentives for both institutions and individuals who seek to generate holistic understandings of educational issues.

Applied research reaches towards contemporary and contextualised issues. It may draw on disciplinary understanding, methodologies or tools but directs them to specific, grounded purposes. In this way, applied research is often more national in its scope, with international comparison just sometimes used to highlight similarities and differences. A particular feature of the last decade, led by TLRP among other initiatives, has been the movement to involve potential end-users of research in such work at very early stages. Advocates of such user engagement envisage involvement from conceptualisation onwards and it is argued that this increases both the validity of such work and its eventual impact. Funding for applied research has been significant in recent years, with substantial support from governments, ESRC and charities. However, pressure for relevance and, more recently, for impact has been intense. The tension between taking research issues from others for investigation and striking out more proactively and independently remains real. The role of ESRC’s responsive mode funding is particularly significant for the latter.

Evaluative and developmental research is often focused on particular initiatives and essentially describes summative or formative processes of evidence-based review. Given the scale of new educational developments in the last decade, this has been a rapidly expanding area of research activity and demand has been satisfied by a wide range of organisations including those in the private sector. Those commissioning such work often have a particular need for evidence in respect of piloting initiatives prior to scaling up or for measurement of outcomes. However, there is also a risk of evaluation becoming merely procedural. In this respect, it was suggested at SFRE that the development of more selective approaches to evaluation would be appropriate. Depending on the investment, proportionate judgement might be exercised in respect of piloting, cost-benefit analysis, decision-making, review and measuring value.

Practitioner research and enquiry is a very important way of supporting the development of professional expertise amongst teachers. Such work tends to be focused on specific, local contexts and derives particular value from the authenticity which often results. International evidence on the efficacy of such activity for professional learning, especially when conducted collaboratively, is strong. This has led to the development of initiatives in particular sectors, such as those by the TDA, UK GTCs, LSIS and HEA. Much intrinsically worthwhile practitioner enquiry is not made public for quality assessment and analysis across case-studies with high levels of variability in circumstance and research process is intrinsically difficult. However, the quality of insight and developmental power of practitioner enquiry explain the international reputation which the UK has developed for such work – despite an overall lack of continuity in such initiatives over time.

### Multi-disciplinary collaboration in the ERA

Launched at the Lisbon European Council in March 2000, the creation of a European Research Area was given new impetus in 2007 with the European Commission’s Green Paper on ERA. In 2008, acting on concerns about ongoing fragmentation of the research efforts and infrastructures in Europe, the Council set in motion the Ljubljana Process to improve the political governance of ERA. ERA’s 2020 vision is to create a space of “free movement” of knowledge, technology, and knowledge actors across along national and institutional borders. To this end, it supports transnational cooperation in European research, joint infrastructure, shared agendas, and the mobility of researchers and graduate students. This effort is supported by several funding schemes, most notably by the European commission’s 7th Framework programme, with a budget of Euro 50.5 billion over six years. FP7 introduced major new instruments, such as the European Research Council. The programme supports primarily cooperative inter- and multidisciplinary research. For example, within the key themes to be funded by the core scheme of FP7 (“Cooperation”), “education and lifelong learning” feature under “growth, employment and competitiveness in a knowledge society”, alongside work on labour markets, economics, and innovation. [http://ec.europa.eu/research/era/index\\_en.htm](http://ec.europa.eu/research/era/index_en.htm)

### Chartered Teacher Scheme, Scotland

The Chartered Teacher Programme is a professional and career development scheme for teachers that was introduced in Scotland in 2002, following an Agreement (A Teaching Profession for the 21st Century, January 2001) that had been reached following recommendations made in the McCrone Report (2001) by an implementation group with membership drawn from teacher, organisations, employers, and the Scottish Executive. Teachers are required to complete a total of 12 modules (6 of which can be claimed as prior learning) with an accredited provider before making a claim for the Professional Award of Chartered Teacher to GTC Scotland.

The current Standard for Chartered Teacher includes critical understanding and appreciation of education research and active efforts towards research-informed and research-challenged practice among the key descriptors of chartered teachers’ professional knowledge and understanding. In addition, the chartered teacher is expected to “engage in practitioner enquiry and ensure that the processes and products of this professional action inform his/her practice”.

[www.gtcs.org.uk/ProfessionalDevelopment/CharteredTeacher/CharteredTeacher.aspx](http://www.gtcs.org.uk/ProfessionalDevelopment/CharteredTeacher/CharteredTeacher.aspx)

In SFRE II there was considerable discussion about provision and support for these types of research activity within the major educational sectors of each UK country. Examples of impressive provision have been provided in SFRE Country Reports (see Section II and [www.sfre.ac.uk](http://www.sfre.ac.uk)). However, even on this incomplete mapping exercise it is apparent that some countries have limited capacity and provision for research of these types. It is arguable that disciplinary research is best seen as an international activity, with cutting edge exploration of evidence and ideas across the world – though countries with limited disciplinary expertise are unlikely to be able to tap into such work without seeking external support. In respect of applied research, development and evaluation and practitioner enquiry, countries seeking to establish robust systems for evidence-informed decision-making are likely to want to audit and monitor their provision carefully. Trusting to innovation and diversity in the generation of new applied research has a strong rationale, but limited funding strengthens the case for strategic prioritisation.

A recurrent theme at SFRE meetings concerned the relationship between the infrastructures of teacher education in each UK country and those of educational research. For many years, there have been organisational, intellectual and financial synergies between these two activities. For instance, teacher education provides important access points for practice-oriented researchers and research contributions enrich the quality of teacher education courses. The outcome of the 2008 RAE showed a wide range of institutions with strength in both areas of activity. However, such contemporary achievements increasingly rest on high degrees of internal role differentiation, with teaching and research staff operating in separate spheres. Many research-oriented departments are also extending their range of social scientific activity, so that the focus on education and synergies with teacher education are weakened. Participants at SFRE, particularly those with specialist knowledge, believed that contemporary trends were weakening the synergy between research and teaching in education. Whilst the concern tended to focus on changes in research policies weakening teacher education provision, it is also the case that changes in teacher education policy, for instance, weakening the role of HE, could have unintended consequences for educational research and thus for UK systems as a whole.

In summary, it was felt important to recognise that there are different types of research, albeit sometimes interlinking and overlapping, each with its indispensable contribution to a mature education system. The diversity of this research infrastructure should be supported.

## Recommendations

### Creation and production

4. Stakeholders in each country should regularly review provision for each of the major types of research in each key sector within their education systems and should consider the conditions which enable or constrain their development.
5. Collaboration among educational researchers in different areas and types of research should be encouraged, together with sustainable initiatives and incentives to promote more multi-disciplinary and inter-disciplinary research and methodological innovation.
6. The active promotion of user engagement in applied research should continue.
7. Developmental and evaluative research should be used in proportionate ways for piloting, cost-benefit analysis, decision-making, review and measuring value in respect of major investments.
8. Practitioner enquiry should be an integral, long-term part of provision for professional formation, development and knowledge creation in all educational sectors.

### York Consulting

York Consulting offers applied, evaluative and developmental economic and social research services across UK public and private sectors. A multi-disciplinary team of consultants specialises in three thematic areas: education, children and young people; learning and skills; and regeneration. Clients include national government departments, government agencies, local government, private companies and voluntary organisations. Particular services provided include policy analysis, impact assessments, surveys, event facilitation, costing studies, business planning and performance measurement. [www.yorkconsulting.co.uk](http://www.yorkconsulting.co.uk)

### LSIS Excellence Gateway

The Learning and Skills Improvement Service Excellence Gateway has been provided with the aim to ensure that the further education sector has access to evidence that will support improvement in teaching and learning. The Gateway attempts to bring a range of online resources for further education staff together on a single website and a number of existing further education websites have been migrated to the Gateway. It is intended. Priorities are to: support practitioners in the sector to do research and increase their capacity as researchers on the frontline; support the sharing of professional expertise and translate relevant research findings into practical messages for the sector; provide LSIS with an evidence base on what support the sector needs; and raise the profile and value of research in the sector. [www.excellencegateway.org.uk](http://www.excellencegateway.org.uk)

### UCET

The Universities Council for the Education of Teachers acts as a national forum for the discussion of matters relating to the education of teachers and professional educators, and to the study of education in the university sector and contributes to the formulation of policy in these fields. Its members are UK universities involved in teacher education, and a number of colleges of higher education in the university sector (quoted from UCET website). As part of its mission, UCET champions the role of research in enhancing the professional status of educators throughout the UK. Recent initiatives included a research prize open to practitioners working in education settings who conduct research that supports CPD for teachers and other educators; scholarships to allow full-time academics at UCET member institutions at an early stage in their careers to investigate aspects of teacher education or undertake educational research in overseas universities; and an annual conference showcasing recent research on teacher education. [www.ucet.ac.uk](http://www.ucet.ac.uk)

## C. Assessment and validation

Discussion of the assessment of research and validation of research knowledge pervaded many SFRE discussions. The perspectives of a wide range of stakeholders were considered, from peer review of research outputs, to funder evaluation of completed research and to user selection of research evidence for practical purposes.

In discussion of the assessment of research quality, there was a high level of agreement at SFRE that general criteria concerning quality needed interpretation when applied to particular types of research. Thus the quality of a survey, teacher-led enquiry, ethnography or randomised controlled trial should be judged in relation to appropriate methodological standards. A wide range of research approaches was valuable in illuminating different aspects of education, but all approaches should be open to appropriate challenge.

A detailed review of criteria and procedures for the assessment of education research quality in a wide range of contexts emerged from discussions at SFRE and was commissioned by the TLRP. The review focused on assessment in publication, funding and investment contexts, but also touched on everyday assessments (for example for use, for review, or for educational and degree-awarding purposes) (Oancea, 2009).

For the higher education researchers present at the SFRE events, research assessment was a reality of their working lives, particularly as the three SFRE events coincided with the RAE 2008 cycle of submission, assessment and outcomes. Indeed, consultation and debate about the next formal exercise, the Research Excellence Framework, followed soon after.

Discussion took place at SFRE on a BERA/UCET report on the impact of RAE 2008 on education research units (Oancea et al, 2010). This noted the mixed outcomes of the exercise for most departments in the country, in terms of prestige, environment and finances. Many of these outcomes had been positive, for example, in terms of stimulating stronger research cultures, particularly in units that benefited from a supportive relationship with the wider institution, in which they were based. However, for a lot of departments the exercise had been followed by challenging times, particularly in the context of economic crises and financial cuts. The forthcoming REF was perceived by staff in education departments across the four countries as similar to the RAE in most respects, with the exception of an increased, and contentious, emphasis on research impact.

Whilst formalised research assessment was inevitably an important concern for higher education participants to SFRE, other constituencies placed much less weight on such results and on their implications. For them, what was crucial was the selection, weighting and interpretation of evidence, including research evidence from higher education and from other sources, for practical purposes. Fitness for purpose was seen as crucial in the process of distinguishing between essential information and “noise” in a particular decision-making context. Academic criteria of quality, used in the peer review system, were important in this process. However, if they were to inform the process of making decisions about research use, they themselves were felt to need translation and interpretation for a range of audiences.

A tension was often mentioned at SFRE meetings in relation to academic work. Commitment to working with partners to address practical problems was juxtaposed with the demand to maximise the volume and quality of conventional academic outputs - in particular, journal articles. Dissonance was also noted between academic and user evaluation of education research knowledge, underpinned by sometimes divergent sets of values, criteria and standards. There was a strong feeling that future methods for the allocation of core research funds in higher education should ensure that they do not unwittingly damage the stability of the research infrastructure and generate perverse incentives in relation to academic behaviour.

### EERQI

The European Educational Research Quality Indicators project (2008 to 2011) is being funded within the EC 7th Framework Programme for Research. Within its overall goal of contributing to the reinforcement and enhancement of the worldwide visibility and competitiveness of European educational research, the project works towards developing new indicators and methodologies to determine quality of educational research publications and new multi-lingual technologies (including a dedicated search and query engine) to support quality assessment of research in Europe. The intermediate results of the project will be discussed at a two-day event in Geneva, in September 2010. “All in all, the EERQI consortium agrees on the position that effective procedures of assessing research quality in future will have to apply a combination of methods, not a single (set of) indicator(s)” (quoted from the EERQI website, [www.eerqi.eu](http://www.eerqi.eu)).

### TLRP

The Teaching and Learning Research Programme (ESRC), the UK’s largest programme of educational research, explicitly aimed to fund projects which combined high relevance and excellent social science. This was reflected in commissioning, annual reporting, programme activity and final evaluation of all investments. Relevance was promoted through high levels of user engagement from practitioners in research sites and from key players in national bodies. Practitioners strengthened the authenticity of the work and lent credibility, whilst close links to organisations with developed communication infrastructures and influential roles provided the foundation for effective impact strategies. ESRC evaluation of TLRP projects revealed no loss of scientific quality from such engagement and, indeed, it is arguable that the validity of the studies was increased. Impact was certainly much more effective where high levels of constructive user engagement existed. TLRP, as a coherent, managed programme, was able to achieve considerable congruence between its aims, processes and criteria for assessment. Where misalignment occurred, particularly with interpretations of RAE requirements, the power of academic imperatives diluted attempts to maximise relevance. [www.tlrp.org](http://www.tlrp.org)

Similar issues apply to the assessment and validation of research activity from beyond the academy - from practitioners, public agencies, think-tanks, voluntary sector organisations, independent researchers, consultancies and, sometimes, government departments – where the evidential basis of such work is not peer-reviewed or otherwise fully open to public scrutiny. Indeed, expectations in respect of theoretical and methodological transparency, publication and critical evaluation vary considerably - but public awareness of such variation was not felt to be great. There was thus a concern at SFRE that many users might not readily be in a position to assess the quality of evidence with which they might be presented.

## Recommendations

### Assessment and validation

9. Criteria applied in the assessment of research quality should be appropriate for the research approach under consideration.
10. Work should continue on how to better align public aspirations for the relevance of applied research and academic criteria for its assessment and validation.
11. Producers of published research which is not subject to peer-review should provide sufficient methodological detail to enable critical assessment and validation of the work.

### Excellence in applied and practice-based research

The discussion of quality in applied and practice-based education research in Oancea and Furlong (2007) noted a difference between aiming for better performance in public assessments of quality (accredited on the basis of agreed quality criteria) and cultivating intrinsic excellence in both research and practice (MacIntyre, 1985). The authors suggested a more holistic understanding of research “excellence” that included epistemic (demonstrable knowledge), practical (virtuous action in the public space) and technical (skilful production and performance) considerations. The three domains were seen as complementary, within a wider concept of ethical action towards the “human good”, which the authors placed at the core of applied and practice-based research. The framework proposed by Furlong and Oancea was referenced in the RAE 2008 documentation and in a range of other policy and research documents. A seminar series organised by Gary Thomas with TLRP support in 2005 had also occasioned discussion of the issues surrounding quality assessment of research in education, including a first version of the Furlong and Oancea framework (see Macnab and Thomas, 2007).

### OfSTED

The OfSTED brings together the experience of four inspectorates to regulate and inspect – and a large amount of data is produced as a result. As well as reports from inspections of institutions, OfSTED publishes a wide range of thematic reports, aggregated statistics and consultation outcomes. Information is presented specifically in relation to parents and carers, children and young people and adult learners and employers. In respect of the latter, OfSTED’s ‘Good Practice Database’, accessible from the LSIS Excellence Gateway, is an example of professional advice being fed back to a sector based on inspection experience. [www.ofsted.gov.uk](http://www.ofsted.gov.uk)

## D. Collection and interpretation

Discussion of the collection and interpretation is distinct, but linked, to consideration of mediation and brokerage – the focus of the following section. We therefore begin with clarification of the meaning we use for these terms.

By collection, we simply mean that research findings, analyses and resources must be accumulated, catalogued and made accessible. Libraries, databases and websites do this job.

By interpretation, we highlight the need for research evidence and analysis to be reviewed, evaluated and integrated in methodological, theoretical and substantive terms. In particular, high quality work must be synthesised with pre-existing understanding.

Such knowledge then has to be mediated and communicated through targeting particular audiences. Typically, this involves specialist work in different education sectors.

The UK has a wide range of both physical and electronic collections of research evidence. These include conventional libraries and archives on the one hand and data-bases, repositories and new media on the other. For example, in the case of school-level research in England there are significant libraries at NFER, the Institute of Education in London and at many other universities. These collections service researchers and students in particular, but also support a wide range of other users through open-access agreements. Data-bases and repositories tend to be designed with more specific audiences in mind. The British Education Index (BEI) is the most established academic resource for journal output and maintains high quality control. Its focus is on peer-reviewed work and most grey literature is excluded (though there is a significant collection for conference papers). However, BEI also provides services for several other e-resources serving different audiences – including, in particular, the Educational Evidence Portal. EEP presents material, often grey literature, from a defined set of organisations, each self-nominating content and declaring their own quality control procedures. Developed from 2004, EEP is targeted mainly at users of research. Current Educational and Children's Services Research in the UK (CERUK) provides information on current research projects which have not yet reported.

Four points can be made about such resources for the collection and presentation of educational evidence for use. First, UK users have to negotiate a variety of different sources to access books, academic journals, websites and grey literature. Whilst partially overlapping, these resources are not integrated and particular search and referencing systems have to be learned. Second, access is partially restricted because of funding models. The outstanding example of this is the BEI which, although offering very high quality information, is only available on subscription. Although open to most UK higher education users, it is inaccessible to most other educational organisations, to the media and to the public at large. Third, funding for BEI, EEP and CERUK is understood to be short term and library budgets are also under constant scrutiny. Even the limited infrastructure described above is therefore insecure. Finally, existing provision appears to be strongest in relation to England, and particular attention is required to draw on and support the assets of Northern Ireland, Scotland and Wales.

There is thus a strong case for the consolidation of selected major UK assets, including BEI, EEP, CERUK, the Newsam Library and other major national libraries into a UK Education Information Service. Such a service might be modelled on the US ERIC. This is a freely available, reference database providing on-line access to a comprehensive range of public material on education. It currently contains over 1.3 million records and is a core resource for US educational organisations, bodies and initiatives. Achieving and sustaining a cost-effective, integrated, open access and user-friendly Education Information Service is essential if the use of evidence in policy and practice is to grow. Such services might be regarded as foundational for policy, practice and democratic deliberation. SFRE has commissioned a technical trial of this. However, significant

### BEI

Dating back to the 1960s, the British Education Index supports the professional study of education by facilitating the identification, interpretation and appropriate use of journal articles, conferences and conference papers, research reports and electronic texts – but not books. The BEI comprises over 180,000 records, including Education-line, a subject digital repository originally set up with funding from JISC. BEI supports almost 70,000 search runs each month from 114 UK subscribing institutions, and provides services to EEP, TTRB and other brokerage organisations. BEI is currently self-supporting, via subscription, and is managed by the Library of the University of Leeds. [www.bei.ac.uk](http://www.bei.ac.uk)

### CERUK

CERUKplus is a free, online database of current and recently completed education and children's services research in the UK. Funded by the Department for Education (England) and the NFER and run by NFER, it covers research by higher education, private and independent researchers and practitioners, individual PhD studies, as well as long term, large-scale research such as national surveys. Information for the database is directly from researchers and funding and research organisation, and via trawling of relevant web sites. CERUK's website also offers a 3-D map of selected research-informed on-line resources for education professionals. [www.ceruk.ac.uk](http://www.ceruk.ac.uk)

### EPPI-Centre

The Evidence for Policy and Practice Information and Co-ordinating Centre, initiated in 1993, is part of the Social Science Research Unit at the Institute of Education, University of London. Funded by the ESRC, several government departments and charities and other partners, the Centre conducts systematic reviews in education, health promotion, employment, social care, crime and justice. The Centre hosts an online evidence library that provides access to completed and ongoing systematic EPPI-Centre reviews and to all the key-worded references that had been included in these reviews. The Database of Education Research currently contains approximately 3000 records. The centre also provides training in systematic research synthesis methods for education and develops tools and materials to support those undertaking reviews in education. The EPPI-Centre sees knowledge synthesis as a wide concept encompassing a range of strategies aimed at critically integrating contributions to knowledge from all perspectives on research, on all research questions, arrived at with any methods of primary research, and using any methods of systematic review. Fitness for purpose is seen as crucial to a good research synthesis. [www.eppi.ioe.ac.uk](http://www.eppi.ioe.ac.uk)

progress would require cooperation amongst the organisations involved, leadership from government bodies and support from initiatives such as the Coalition for Evidence-based Education (CEBE) and the multiplicity of stakeholder organisations which would benefit.

The classic process of research interpretation in the academic world is by expert review. This is apparent through the national and international reputations which are established by many UK researchers. Specialist journals and handbooks containing review papers provide vehicles for such work and conventions for judging, reporting and interpreting particular types of evidence have been established for decades as forms of scholarship. Such interpretation facilitates comparison with existing frameworks of understanding and the testing or development of theory in expert ways. The interpretation of evidence, whether by academics or research users, was viewed by SFRE participants generally as being essential for the complex issues with which educational research is routinely concerned.

In recent years, reliance on expert judgement and peer review in education has been complemented by systematic review procedures which adopt explicit criteria for judging inclusion and quality. The EPPI Centre has led on ways of evaluating and synthesising both quantitative and qualitative research, thus maintaining an appreciation of the complementary contributions of different research approaches. Best Evidence Syntheses from New Zealand have made a considerable impact and the University of York's Institute for Effective Education is now offering a similar facility drawing particularly on the strengths of US research. The latter include the work of the Institute for Education Sciences and the What Works Clearinghouse. When such systematic syntheses of knowledge are comprehensive, rigorous and fit for purpose, then they have considerable potential to improve the effectiveness through which policy-makers and practitioners gain access to evidence. Syntheses can also highlight gaps and uncertainties in existent research, substantively, theoretically and methodologically. Balanced open-mindedness is needed however, for narrow interpretations of appropriate forms of research data, design or analysis may limit substantive insights and theoretical and methodological progress.

These examples illustrate what is possible in relation to the interpretation and synthesis of knowledge, but UK provision is limited and fragile in relation to the scale of education services and potential demand. Classic forms of academic review have been under pressure for some years because of the high status of generating research project income in academic career development and the relative lack of incentivisation of scholarship. In relation to systematic reviews, coverage is limited and the development of new services is very welcome. School matters such as basic literacy and numeracy tend to be better catered for than other topics, and there are significant capacity issues in particular countries within the UK and in relation to some sectors, disciplines and issues. The result is a tendency to draw on international evidence which may or may not be applicable in local contexts for practice in the UK.

From the user perspective, there is a lack of clarity over the status and roles of organisations offering evidence services. Some are primarily concerned with the collection and presentation of knowledge, some with interpretation and synthesis and others with mediation and communication. These analytically distinct roles are also sometimes, but not always, combined. Nor is the quality of evidence and interpretation being provided always clear to users.

The implication which has sometimes been drawn is that such concerns could be addressed by the establishment of a single, centralised 'Evidence Centre' for research syntheses and advice on policy and practice, either for England or the UK as a whole. Such proposals often cite both US examples and that of the National Institute for Health and Clinical Excellence (NICE).

Deliberations at SFRE suggest that such an initiative may be a step too far in education at present. First, the significance of values in educational decision-making combined with the diversity of research approaches suggest that any organisation aspiring

### **Newsam Library and Archives**

The library of the Institute of Education, University of London is the most comprehensive research resource in the field of education in the UK, containing more than 300,000 volumes and nearly 2,000 printed periodicals (4,000 electronic). The main education collection contains a copy of every book on education published in the UK, and a substantial range from elsewhere. Collections also include teaching and curriculum materials, subject collections, and 23 special collections, such as the National Textbook Collection. The Archives contain over 100 deposited collections, including the records of influential individuals and organisations involved with education. The Library's catalogue is a resource in its own right. [www.ioe.ac.uk/services/4389.html](http://www.ioe.ac.uk/services/4389.html)

### **The Campbell Collaboration**

The Campbell Collaboration held its inaugural meeting, convened by Robert Boruch at the University of Pennsylvania, in February 2000. The aims of the Campbell Collaboration are to "help people make well-informed decisions by preparing, maintaining and disseminating systematic reviews in education, crime and justice, and social welfare" (Campbell collaboration website). The Collaboration produces systematic reviews of the effects of social interventions. The systematic reviews are published consecutively in a peer-reviewed monograph series (Campbell Systematic Reviews) and are collected in the Campbell Library. [www.campbellcollaboration.org](http://www.campbellcollaboration.org)

### **ERIC**

The US Education Resources Information Center - is an online digital library of education research and information. ERIC is sponsored by the Institute of Education Sciences of the U.S. Department of Education. ERIC provides ready access to education literature to support the use of educational research and information to improve practice in learning, teaching, educational decision-making, and research. The ERIC mission is to provide a comprehensive, easy-to-use, searchable, Internet-based bibliographic and full-text database of education research and information. ERIC continues to explore new approaches to enhancing and expanding services to the user community. Through collaborative efforts and with feedback provided by the ERIC user community, the ERIC program continues to enhance online services, expand access to full-text materials, and increase the number of journal and non-journal sources indexed in the Collection. [www.eric.ed.gov](http://www.eric.ed.gov)

to offer centralised prescription in education could potentially be even more controversial than NICE has been in medicine and health care. Second, progress in engaging practitioners with education research and enhancing professionalism could be seen by some as being undermined by establishing such a centre – as substituting one form or centralised control with another. As indicated in discussion of SFRE principles, the aspiration that judgements in policy and practice might be ‘informed’ by evidence is more realistic, respectful and accurate than the claim that ‘what works’ can be prescribed in this field. Nor would even a staff of over 400 and a budget of £60m, as NICE enjoyed in 2009/10, overcome such realities – though high potential cost, a third ground for caution, is a consequence of attempting to establish a centre with such high aspirations. Finally, the range, diversity and vitality of mediating and brokerage organisations represented at SFRE suggest that national, distributed and sectoral solutions might be more appropriate where recommendations are to be made – as modelled, for instance, by Learning & Teaching Scotland or C4EO. Commercial providers are also active in this area and may be a source of future provision in the light of public sector cut-backs. It is thus not self-evident that a NICE for education could be effective or afforded – or is needed.

Yet, the range and complexity of information sources is certainly an issue which demands attention.

If there is to be formal endorsement of any new form of information resource for educational evidence, then strategic positioning and competition between institutions, service providers or other interest groups should be expected both within and beyond the academy. Leadership in commissioning from an appropriate government body might be very important.

## Recommendations

### Collection and interpretation

12. Those responsible for major UK-wide resources for the collection of evidence about education should be encouraged to explore consolidation to provide a sustainable, cost-effective, comprehensive, publicly accessible and user-orientated ‘UK Education Information Service’.
13. In relation to knowledge interpretation and review, the value and complementary roles of academic scholarship and of synthesising organisations should be affirmed and incentivised where appropriate.
14. The aspiration to establish a single, centralised evidence organisation for education, comparable to NICE and offering recommendations for policy and practice, should be regarded as a step too far.

### The Educational Evidence Portal

The Educational Evidence Portal (EEP) is a collaborative project of over 30 organisations primarily in England and has developed since 2004. It aims to provide access for professionals to a range of research and evidence materials held in online sources. There are currently two ways to search for evidence through EEP - a web search covers documents on the sites of a wide number of organisations; and a database search interrogates a collection of individual documents selected by a subset of organisations. These are indexed (or meta-tagged) by British Education Index to provide a more refined search. EEP aims to cover all areas of education and training. EEP is developing a taxonomy of terms and a UK ‘map’ of evidence resources. EEP is supported by a consortium of organisations, led by CfBT. [www.eep.ac.uk](http://www.eep.ac.uk)

### NICE

The National Institute for Health and Clinical Excellence was established in 2004 and receives core funding from the Department of Health in England. It provides guidance, sets quality standards and manages a national database to improve people’s health. NICE makes recommendations to the NHS and other organisations on: new and existing medicines, treatments and procedures, treating and caring for people with specific diseases and conditions and how to improve people’s health and prevent illness and disease. NHS Evidence, launched in 2009, allows NHS staff to search the internet for up-to-date evidence of effectiveness and examples of best practice in relation to health and social care. NICE works with experts from the NHS, local authorities and others in the public, private, voluntary and community sectors – as well as patients and carers. It aims to make independent decisions in an open, transparent way, based on the best available evidence and including input from experts and interested parties. [www.nice.org.uk](http://www.nice.org.uk)

### C4EO

C4EO (Centre for Excellence and Outcomes in Children and Young People’s Services) aims to identify, co-ordinate and disseminate national, regional and local evidence about systems and practice on five themes: Early Years; Disabled Children; Vulnerable Children; Safeguarding and Child Poverty - with three further themes planned (Youth; Schools & Communities; Families, Parents and Carers). C4EO outputs and services include scoping and knowledge reviews on particular topics, progress maps (interactive web-based tools to help professionals access and apply evidence from the knowledge reviews), specialised multimedia outputs, regional knowledge workshops and programmes to support local capacity for improvement. [www.c4eo.org.uk](http://www.c4eo.org.uk)

## E. Mediation and brokerage

Mediators link and enhance communication within the many overlapping communities with an interest in education research - including practitioners, professional bodies, civil servants, local government officers, politicians, third sector organisations, inspectors and so on. Effective research mediation was perceived by many SFRE participants as not only an attribute of a good research environment in higher education, but also as indicator of a well-functioning, evidence-informed democracy.

At SFRE there was considerable appreciation of the exceptional efforts which have been made by various government agencies and other organisations to broker and promote the use of evidence in each country, often in relation to particular sectors. Examples reviewed included provision at DCSF, LSIS, the HEA, Teaching and Learning Scotland, TDA, TTRB, NCSL and the GTCs in Scotland, England, Wales and Northern Ireland. WERN's impressive mediation of TLRP findings in Wales was also noted. C4EO was identified as a significant model for the brokerage of research to practitioners, and organisations such as CUREE were similarly recognised for its wide-ranging innovation in linking research and practice. It was acknowledged however that, despite all these efforts, overall UK provision was not comprehensive and of consistently high quality. Further, there was a perception at SFRE that more high quality research existed, generated both within the UK and across the world, than was routinely drawn upon to inform education policy and practice. The role of mediators and brokerage agencies is thus vital. However, the reality is also that the extent of resources available for mediation and brokerage by publicly funded bodies is likely to be much more limited in future. Even with a possible expansion of private organisations, the need for increased capacity to support the use of educational research is thus likely to remain considerable.

Perhaps reflecting the history of its development, overall UK provision for brokerage, mediation and communication of research might be described as fragmented – certainly if analysed in sectoral terms within each country. And yet it reflects authentic development in response to user needs and stakeholder interests. In contemporary circumstances, this situation is unlikely to change and, indeed, to seek to build upon it may be the most viable strategy available.

In responding to this situation and to maximise access and use, the UK information landscape, including all mediation, brokerage and communication bodies, needs to be systematically mapped and described through a public internet portal – a task which has already been initiated by EEP and which could become part of a comprehensive UK Education Information Service. If funds allowed, a linked, library-based evidence advisory service might also be established, similar to that successfully provided for TTRB by the Newsam Library. Such a website and advisory service could maintain comprehensive information on the available UK and international resources, including data on the range of content, selection criteria, provenance and intended audiences. Thus, for relatively modest cost, significant value could be added to services which already exist. The sustainability and accessibility of such a portal would need to be assured as part of a public service commitment by sponsoring organisations.

Given the ebb and flow of funding and commitment in respect of mediating initiatives, it is also the case that publicly-funded resources are often at risk of being lost to users. To retain such value, provision for harvesting and archiving should be made where appropriate. Materials from the English National Strategies and GTCE's Research for Teachers are examples of resources which have appeared to be at risk as following changes in policy.

SFRE participants felt that communication of education research should be an appropriately incentivised component of academic work. Many at the meeting described this as a moral responsibility towards research participants, beneficiaries and the tax-paying public at large. However, academic commitment to research mediation and the different set of skills required by this activity were seen by some

### STEC Framework for Inclusion

The Framework for Inclusion was developed by a Working Group set up by the Scottish Government, through the Scottish Teacher Education Committee. A poster and a website bring together research evidence, legislation, and practical experience on inclusion, organising them around three professional development areas (values and beliefs, professional knowledge and understanding, and professional skills and abilities) tailored for different stages of the teaching career. The website offers research input (e.g. video and presentations), suggested reflective tasks, and guidance for seeking further information. [www.frameworkforinclusion.org](http://www.frameworkforinclusion.org)

### CUREE

The Centre for the use of Research & Evidence in Education is a company engaged in mediating education research knowledge and promoting the use of research to enhance educational practice, at individual practitioner level and at system level. At individual level, examples of tools developed and managed with contribution from CUREE include “web digests”, micro-enquiry tools based on “nuggets of evidence” (e.g. GTCE tasters), magazines, major research summaries, CPD tools and resources, coaching programmes & structures (e.g. Training Schools, Lead Practitioners), and the work of the National Teacher Research Panel. Examples of system-level activities include translating systematic reviews into a National Framework for Mentoring and Coaching ([www.tda.gov.uk](http://www.tda.gov.uk)) and the development of a web-based “route map” of free resources for communicating with teachers about research. [www.curee-paccts.com/resources/route-map](http://www.curee-paccts.com/resources/route-map)

### TTRB

The Teacher Training Resource Bank was officially launched in 2006 by a consortium supported by the TDA with the central aim of making the Initial Teacher Education (ITE) professional knowledge base more easily accessible and recognised. The Bank includes a range of resources, from research to media, policy, and curriculum materials. Research-related resources include user-focused summary reviews of research outputs, statistics and data, and evidence syntheses. The site also offers an “e-librarian” service to help practitioners source research evidence on particular topics. [www.ttrb.ac.uk](http://www.ttrb.ac.uk)

as significant potential difficulties. The persistence of these was partly linked to inadequate incentives, training and infrastructure, but also to the dominant forms of academic incentivisation.

In parallel however, the capacity of policy makers, practitioners and the media to effectively interpret and use research was seen as a significant constraint and sometimes led to distortion of research findings. Communication and cooperation between these groups, rather than working in relative isolation from each other, was seen as being crucial. Such collaboration needed to be approached with particular care when mediating bodies are explicitly funded by government. The development of protocols to frame such relationships was suggested.

In terms of processes, expectations of user engagement, co-production and dialogue between stakeholders at all research stages were seen as significant advances on simple 'knowledge transfer' or dissemination events. In relation to outputs, discussions at the forum highlighted the importance of tailoring writing styles and presentation formats to the full range of audiences. There were, however, tensions between simplifying to provide clarity and the risk of trivialising findings. Mediation was thus seen as an expert process, requiring good understanding of the epistemic, political and practical constraints operating in the relevant research and user communities. Whilst printed outputs were still valued for ease of use and might be targeted on key opinion leaders, new technologies were creating many opportunities for large scale electronic distribution.

## Recommendations

### Mediation and brokerage

15. The value, and limitations, of specialist research mediators and brokerage agencies should be recognised, particularly in relation to targeted sectoral or other audiences in each country.
16. A comprehensive map of the UK information landscape should be created to increase the accessibility of brokerage organisations and mediated research resources.
17. Universities, academics and other producers of research should make provision for effective communication and mediation of findings as an integral part of their work.

### GTCE's Research for Teachers

Research for Teachers is a resource developed by CUREE for the General Teaching Council for England with the aim of supporting practitioners' engagement with research. The site offers thematically-organised "research tasters" consisting of "nuggets of evidence" followed by suggested enquiry activities based on the evidence, next steps to move practice forward, and references to further information. The materials prompt teachers to interrogate their practice and the available evidence, and supports them in gathering, assessing, and integrating research evidence in their practice. [www.gtce.org.uk/teachers/rft](http://www.gtce.org.uk/teachers/rft)

### GTCNI AARTS

GTCNI has supported the development of the Access to Research Resources for Teachers Space (ARRTS) which is an educational research database making relevant publications available to educational professionals "at the touch of a button". The database has been developed to promote evidence-informed practice and policy-making in education and encourage a partnership between the local educational research community and teachers. It also provides opportunities for teachers and other educational professionals across the world to access a large range of scholarly literature on Education in Northern Ireland and to find research that is relevant to their needs. [arrts.gtctni.org.uk](http://arrts.gtctni.org.uk)

### DCSF Research Summaries

The office of the Chief Adviser on School Standards Unit at the Department for Education produces a number of resources to review the latest research findings on school standards and related issues. These resources include a research newsletter for policy staff, practitioners, and teacher educators. 'Research Bites' are 90-second presentations with summaries of key research on practical classroom issues for practitioner audiences. 'Subject-specific Updates' are collective reports on all the research published in the research newsletters for a particular subject area (e.g. English, mathematics, science or ICT). [www.teachernet.gov.uk](http://www.teachernet.gov.uk)

### Professional Skills for Government

Within the Civil Service there is a Professional Skills for Government (PSG) competency framework. The set of core skills required for all Civil Servants includes Analysis and Use of Evidence. Within the Department for Education in England a training module has been developed in conjunction with analysts using relevant examples and experience. The training helps policy makers to effectively use evidence through identifying sources, assessing their validity, using evidence to evaluate; and working with experts to evaluate and communicate results. [www.civilservice.gov.uk/about/improving/psg](http://www.civilservice.gov.uk/about/improving/psg)

## F. Use and impact

By many SFRE participants, it was felt that large scale use of research findings and insights into practice had in recent years been largely dependent on government promotion and incorporation into education policy. However, this was subject to political considerations which were hard to anticipate or manage. Many academic participants were resigned to this, but nevertheless felt that contributions to knowledge were worthwhile in their own right.

From the perspective of practitioners, imposed requirements of any sort – whether evidence-informed or not – tended to be unwelcome. However, there were strong views concerning topics on which research would be valuable and also in relation to forms of communication and engagement. Given more opportunity, it was evident from SFRE that there are practitioners in all sectors who are both willing and able to make significant contributions as constructive critics, advocates, partners and researchers in their own right.

‘Scaling up’ was perceived as an important challenge for the implementation of evidence-informed policies and practices. It was considerably helped by sound evaluation of initiatives and by authentic consultation and participation with targeted groups, such as practitioners. Those at SFRE were aware of centrally-directed initiatives in education which had not achieved high impact because of inadequate piloting, evaluation, consultation and participation.

Impact on practice and policy was endorsed as an appropriate goal for much, but not all, educational research. In particular, a distinction was drawn between applied, developmental and evaluative research for which expectations of high impact seemed unquestionably appropriate. Disciplinary research may have more intrinsic qualities and aim to contribute to knowledge for its own sake. Practitioner enquiry of high quality would be expected to have high local impact, but to increase this requires specific forms of support for synthesis, communication and engagement in each national sector.

However, impact was not seen as a clear-cut concept.

At the level of the system, participants suggested that impact could encompass, for example, changes in practice, changes in policy, institutional changes, as well as enhanced public debate and increased public awareness of important issues. Some of these areas could be defined as research application; others, as diffusion of knowledge; others, as challenging established ways of thinking and acting; yet others, as contributions to informed practical judgment.

For individuals in practice and policy contexts, research evidence, however strong, rigorous and effectively communicated, does not simply compel to action. Rather it is filtered through judgments about aims and values, and balanced against other forms of evidence and incentives to action. Dialogue and partnership throughout the research process may enable shifts in the language used in public debates and in the assumptions shaping the use of research evidence. This may have implications for both the individual and the systemic levels. Simply bringing people together in a genuine conversation may, however, be difficult, given the particular constraints within which each community with an interest in education research operates. For this reason, initiatives such as the SFRE were felt to have an important role to play in establishing connections on which future developments may build.

ESRC, in submissions to SFRE, attempted to define three different types of impact. ‘Instrumental impact’ concerns direct influence on policy and practice; ‘conceptual impact’ contributes to understanding or to the framing of debates; ‘capacity building impact’ leads to development of technical or professional skills. Evidence of dissemination is not sufficient and there is a need to capture evidence of use and the processes through which impact occurs. ESRC has also changed its commissioning

### ESRC Strategic plan 2009-2014

“The concept of ‘impact’ in the social sciences applies to all sectors: public, private and third. It embraces economic and societal impact in the sense of direct and often quantifiable economic benefits; wider social impacts that will benefit society more generally such as effects on the environment, public health or quality of life; and impacts on government policy, the third sector and professional practice”.

“The research community needs to appreciate that we’re not going to disadvantage excellent research that doesn’t have obvious or immediate impact. That said, we need the community to work with us to demonstrate research’s impact on society, which is why it is vital to go on investing in it” (Ian Diamond, Chief Executive ESRC).

[www.esrcsocietytoday.ac.uk](http://www.esrcsocietytoday.ac.uk)

### TLRP Review in Wales

This project explored the implications of the findings from the TLRP for educational policy and practice in Wales. Coordinated by John Furlong, teams of researchers from across Wales reviewed findings from the TLRP in relation to four key areas of Welsh policy: the foundation phase; improving teaching for the 7-14 age range; social inclusion; and improving learning by taking account of learners’ perspectives. In order to support research capacity development in Wales, each team included more and less experienced researchers from two HEIs. The outcomes of the reviews included a series of posters and of accompanying briefing papers which were made widely available to policy makers and practitioners across Wales. Also, two meetings brought together policy-makers and researchers to engage in conversation about interpreting research findings and linking them to the School Effectiveness Framework in Wales.

### LTScotland

Learning and Teaching Scotland plays a key role in delivering education reform in Scotland – including significant involvement in Curriculum for Excellence and the implementation of Glow, Scotland’s national education intranet. The aim of research activity in LTS is to facilitate and influence evidence-informed decision making that will improve learning and teaching in Scottish education. Advice is provided to Scottish Ministers on all matters related to learning and teaching, the curriculum, assessment and ICT. LTS works with partners to connect, co-ordinate and facilitate engagement and capacity building between key stakeholders in all sectors to ensure effective provision of research, professional development and the sharing of good practice. The Research Team produces a bi-monthly digest, Research Round-Up, that collates and summarises national and international educational research and statistical reports. [www.ltscotland.org.uk](http://www.ltscotland.org.uk)

and evaluation procedures and post-award scheduling to enable longer term impact to be assessed. Key antecedents of high impact are seen to be excellent relationships between researchers and users at each stage of the research process.

As seen elsewhere in this report, SFRE participants appreciated such impact strategies. Effective user engagement, excellent communication and leadership in the use of evidence from both practitioners and professional researchers were common themes in discussions. However, barriers to achievement of such goals were also noted with, in particular, perverse career incentivisation and research assessment procedures favouring specialisation within the academic community. The alignment of academic commitment and institutional policies was thus felt to lag behind contemporary concern for impact – and many impact-related activities were not felt to be adequately resourced. Nor can the tension be easily resolved between shaping research activity and interpretation to current policy issues and maintaining academic independence within democratic contexts.

The assessment of research impact was thus seen as being highly complex. Indeed, valid and reliable measurement, in any formulaic way, was seen as being almost impossible. More is however becoming understood about the conditions and processes which would favour effective impact and it was felt that this might provide a more valid and reliable set of indicators with which to judge effectiveness.

Ultimately of course, new research findings and understandings have major impact only when they are interpreted and integrated into the personal knowledge structures of key audiences – such as practitioners, learners, policy-makers, journalists, parents, etc. Such knowledge structures are local, diffuse, personal and cultural. Impact and knowledge accumulation at this level is therefore relational and what we want to know something for alters our understanding. The distance between recognition of this type of impact and, for example, economic cost-benefit analysis as a means of measuring research impact is extremely long and the factors involved highly complex.

Understanding of impact, and provision for its measurement, are still evolving across the social sciences in the UK. At SFRE, measurement was regarded as an important issue, despite its difficulty. However, it was felt that peer judgement of the planning, provision and attempts made to achieve impact would probably yield a more dependable set of indicators than reviewing post-hoc narratives alone.

## Recommendations

### F. Use and impact

18. The expectation that those producing high quality applied research, development and evaluation should seek to maximise impact should be endorsed.
19. Practical and cultural barriers to the achievement of greater use and impact should progressively be tackled. This should include attention to personal and institutional incentives in higher education; the procedures, processes and funding expectations of grant awarding, commissioning and evaluating bodies; and the opportunities for and openness of users to engage constructively with researchers.
20. Systematic assessment of research impact should be approached with great care, bearing in mind the multiplicity of factors which can affect outcomes.

### NTRP

The National Teacher Research Panel is an independent group of practising teachers and tutors who work to: ensure that all research in education takes account of the practitioner perspective; ensure a higher profile for research and evidence informed practice in government, academic and practitioner communities; and increase the number of teachers and tutors engaged in and with the full spectrum of research activity. Panel members participate in many national advisory groups and research steering committees. NTRP also published research-related resources, including the “Inside Information” newsletter: [www.standards.dcsf.gov.uk/ntrp](http://www.standards.dcsf.gov.uk/ntrp)

### DfE researcher development days

The English Department for Education is holding training and development days for researchers working in UK universities. The idea for the sessions is to provide researchers with training in how to write up their research with policy and practice staff in mind as well as to advise on utility by providing examples of the mechanisms on how specific studies have informed policy development. So far the initiative has helped to identify relevant research for policy that was ‘outside the radar’ of research already known to departmental staff and is helping to bring HE researchers and policy staff closer together.

### Cambridge Primary Review

This 2006-9 review of primary education policy and provision in England, the first for over 40 years, collected evidence of many kinds – including research surveys, public submissions, policy mapping, community soundings and consultations with national and regional bodies. The volume of evidence was enormous. CPR reported formatively in a series of interim documents – each of which was presented to attract media attention. The Review generated widespread support among practitioners and considerable public interest. Although initially rejected by the DCSF, the interest generated appears likely to sustain the influence of the analysis. The combination of public engagement and high research quality are strong indicators of potential impact. [www.primaryreview.org.uk](http://www.primaryreview.org.uk)

### The Higher Education Academy

EvidenceNet is an HEA's service offering contemporary evidence on teaching and learning in higher education. A broad interpretation of evidence is used, ranging from case studies emerging from practices in particular settings to the outputs arising from large scale research projects drawing on qualitative and quantitative data. Resources, events and social networks support Evidence Net as a free, open-access service. [www.heacademy.ac.uk/EvidenceNet](http://www.heacademy.ac.uk/EvidenceNet)