



# **Disciplinary, applied, developmental and practitioner education research in the UK**

Report of the second SFRE meeting  
17<sup>th</sup> and 18<sup>th</sup> June, Reading

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This report summarises the perspectives expressed at SFRE II. It does not seek to resolve all the issues that were raised, but to act as a basis for further discussions.

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Professor Andrew Pollard (Teaching and Learning Research Programme) has been the driving force of SFRE over the past two years and I would like to thank him for the work and time he has contributed to SFRE through his role as chair.

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Finally, on behalf of those mentioned above, it is my pleasure to thank Sarah Tough (Institute of Education, University of London) who has acted as SFRE's researcher, event-organiser, web-master and coordinator over the past year. This report on Forum II has also been produced by her and stands as a testament to her significant contribution to the implementation of SFRE.

Jeremy Hoad  
Chief Executive, BERA  
December 2009

## SFRE aims

1. In the light of international good practice, to maintain an overview of the UK system and national sub-systems for the production of new knowledge in education and for its transformation, dissemination and use as a whole.
2. To facilitate networking for the exchange of information and the sharing of good practice concerning the organisation, production and use of educational research within the UK.
3. To make recommendations for processes and infrastructure needed to address the long-term sustainability, development and improvement of educational research within the UK, including the identification of research priorities and of particular initiatives and investments to address such concerns.

## Executive summary – Forum II (2009)

The second meeting of the Strategic Forum for Research in Education (SFRE) met in June 2009. The two day event brought together researchers, policymakers, practitioners and other stakeholders from the four constituent countries of the UK in order to discuss the knowledge management systems in the UK. The focus of the second Forum was on different types of research and whether there was appropriate balance of high quality work in each area. Other questions for consideration addressed interdisciplinarity and research priorities.

Education is underpinned by its four foundation disciplines – history, philosophy, psychology and sociology. However, new disciplines such as the economics of education and neuroscience should be welcomed as they offer new insights on education. Multi-disciplinarity is a potential strength. Increasingly and particularly since the calls of the late 1990s for education research to be more ‘useful’ and ‘relevant’, the foundation disciplines have become sidelined in terms of policy and practice.

The contribution of the disciplines to policy and practice should not be underestimated. The disciplines are important in both the rigorous training and induction they provide but also through their contribution to the backdrop in which education policymaking and practice take place. Whilst some disciplines are perhaps less immediately relevant to policymakers and practitioners when ‘what works’ is emphasised, there is still an important role for education research in these disciplines to play - one being strengthening the democratic debate in education.

For the purposes of discussion at Forum II, we considered applied work to include research which is intended to be of direct use to tackle contemporary challenges in education. With two large programmes of applied education research coming to an end (AERS in Scotland and TLRP across the UK) the concern was expressed that education research was facing a potential lack of funding sources available for innovative applied research. Government departments and associated agencies are an important funder of applied research, but their focus tends to be tightly defined and instrumental. Such work needs to be balanced with other sources of funding for broader and more innovative projects, which are perhaps ultimately more likely to contribute to increased understanding around the challenges faced in education.

Evaluative and developmental research is a growing area in education research and is often funded by government departments and associated agencies. This category encompasses a range of different types of work which is undertaken by a range of organisations – many outside of HEIs – for different reasons. The status of evaluative and developmental work is debated within the academy as it is not considered by some to constitute ‘real’ research and, by implication, is not fully recognised in the research assessment exercise (RAE).

Policy interest for evaluation research is currently healthy; however participants to Forum II cautioned against excessive proliferation of insufficiently well planned and resourced evaluations (e.g. “tick-box” audits), a particular risk in the financially constrained climate anticipated for the next few years. Evaluations should be undertaken as a serious, substantial activity with appropriate resources and where there is a true need/desire for it. The relationship between the commissioner

and the research team is crucial in this type of work in that the aims, scope and status of the evaluation must be explicit from the beginning of the process.

Practitioner research usually involves practitioners working with the support of researchers in small-scale school- or classroom-based research. Practitioner research is highly contextualised. A challenge exists in ensuring that maximum value is achieved from the work which happens under the banner of practitioner research, for example, through equipping practitioners with the skills necessary to understand, communicate, and use research. Scaling up and dissemination activities are also important and more work is needed on developing processes and frameworks to enable this. Recent developments such as Chartered Teacher scheme in Scotland and the English Masters in Teaching and Learning are potentially important in further engaging the profession with research. Movements to reverse the current trend towards polarisation between research-intensive HEIs and those primarily focused on teacher education would also be beneficial in terms of supporting quality in practitioner research.

Research impact has become increasingly important in education research in the UK. There is a potential risk, particularly in the current financial context, that short-term instrumental research will be prioritised over research which might be more critical, longer-term or 'blue-skies' in orientation. Whilst the emphasis on the use and impact of research is welcome, particularly in education, which is fundamentally an applied field, a balance in research support should be struck which is suitable for our diverse democracy.

## Executive summary – Forum I (2008)

The first meeting of the UK's Strategic Forum for Research in Education (SFRE) was held in Harrogate on 16<sup>th</sup>-17<sup>th</sup> October 2008. At that event some 70 representatives of practitioner, policy maker and researcher organisations from England, Northern Ireland, Scotland and Wales met to discuss a range of issues concerning the context, quality and development of education research in the UK. The framework for the discussions was provided by an OECD CERI model of 'national knowledge management systems' and the European Commission's 2007 review of provision for the 'creation, mediation and application' of research in support of evidence-informed decision making by practitioners and policy makers.

1. There was broad agreement at SFRE I that consideration of the UK and each country within it in terms of a 'knowledge management system' was a worthwhile exercise in the context of contemporary demand for evidence-based and evidence-informed policy and practice.
2. Reports on each UK country revealed variations in provision for knowledge generation and application, with common weaknesses in relation to provision for knowledge mediation.
3. Education as a research field has broadened considerably in recent years. As a life-wide, life-long field of study it thus requires new inter-disciplinary expertise and particular attention to contexts and transitions. The roots of education research in teacher education for schools are challenged by this development.
4. By national and international standards, a great deal of excellent education research is carried out in the UK. There is also a considerable amount which was acknowledged at SFRE to be of much lower quality.
5. Judging the quality of education research is itself a challenge, and no single set of criteria or indicators can capture the multiple purposes for which research and enquiry activities are carried out. The way forward was felt to be in recognising such different purposes and in managing the consequential tensions they create.
6. UK capacity to conduct high quality education research is significant - but it is also vulnerable, particularly in relation to the age-profile of researchers and some skill-sets. Capacity is a particular issue in the smaller UK countries.
7. Capacity is interpreted in many ways, but also has many dimensions. In the development of new capacity building provision, there is a need for greater understanding of the multiple elements which contribute to capacity, of how they interrelate together and of how particular stakeholders can contribute to the whole.
8. Demand is growing in each part of the UK for high quality, timely and accessible education research on which to base policy and practice. There are capacity challenges for potential users of research in making best use of the resources and knowledge which are already available as well as in commissioning new work.

## Introduction

### SFRE framework

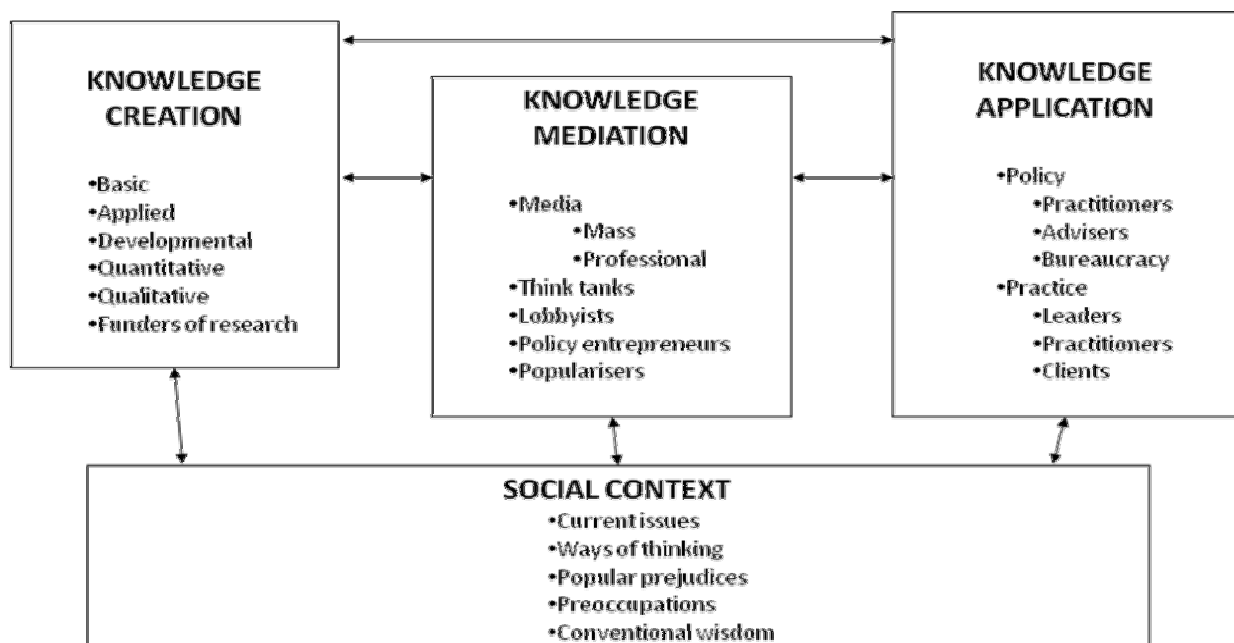
The explanatory text below (pages 9-11) is an update of the text written by Andrew Pollard to introduce the Report of SFRE I (Pollard, 2008). It remains a clear exposition of the rationale of SFRE and of its three stages of review. It therefore provides the context for this report.

The UK Strategic Forum for Research in Education aspires to support multiple stakeholders in all four countries and many educational sectors in reflecting on education research. Underpinning this endeavour is a sustained contemporary demand for high quality evidence about education from government, public services and businesses. This represents a new commitment to the production and use of research (in all its forms) to build understanding of educational issues and to enhance the quality and effectiveness of policy and practice. To achieve the latter, it is argued, we need a secure flow of relevant, high quality research outputs and coordinated mechanisms for knowledge accumulation, transformation and engagement so that impact is maximised.

There have been some impressive developments in UK education research in recent years, but we are a long way from being able to achieve this conception.

Ben Levin (2004) suggested that, to ‘make research matter more’ the knowledge generated has to be managed more effectively to achieve impact. A ‘knowledge continuum cycle’ has been conceptualised and the model below represents an adaption of this in a European Commission Staff Working Document.

**Figure 1: A knowledge continuum**



Source: (EC, 2007: 6; Levin, 2004: 8)

Here, knowledge creation, mediation and application are seen as an integrated, interdependent cycle of activity, in a continuing articulation with cultural, social, political and economic contexts.

This idealised representation has been echoed by the gradual development of a template for reviewing education research infrastructures in different countries by OECD CERI. This was a product of international experts engaged in 'Country Assessments' from 2000-06. Its formalisation began with the Danish review in 2004 and was taken forward in work in Switzerland during 2006. In its most recent manifestation (Pollard, 2007) it probes national provision through twenty questions, organised in six sections:

- Contextual issues
- Strategic awareness
- Basic research
- Applied research
- Development and professional enquiry
- Generic issues

For the purposes of the UK SFRE a simpler framework was necessary, to suit a sequence of discussion in three fora over two years. The SFRE framework, while inspired by the EC and OECD documents, is the product of discussions across a range of UK constituencies with interest in education research. The challenges considered by the SFRE can thus be represented in the following ways:

#### Forum I

- **Context:** What are the contextual circumstances of each country and its aspirations for educational development? What is the nature of existing educational R&D provision and the major contemporary challenges to it?
- **Quality:** What quality assurance and accountability procedures are in place for educational research and development?
- **Capacity:** Is there adequate capacity building to sustain complementary forms of educational research and development?

#### Forum II

- **Basic research:** Is there appropriate provision and incentivisation for the production of high quality and innovative basic research?
- **Applied research:** Is there appropriate provision and incentivisation for the production of high quality and innovative applied research?
- **Developmental research:** Is there appropriate provision and incentivisation for the production of high quality and innovative developmental research, evaluation and practitioner enquiry?
- **Interdisciplinarity:** Given growing awareness of the interconnectedness of education and other fields, how is interdisciplinary research supported?

- **Priorities:** How are researchers, policymakers, practitioners and other appropriate stakeholders engaged in the identification, development, application and evaluation of national priorities for applied research and for development?

### Forum III

- **Knowledge accumulation:** What provision is there for knowledge accumulation and review and for appropriate linkage to UK and international networks, centres and activities?
- **Knowledge mediation:** What provision is there for appropriate co-production, transformation and dissemination of research findings to stakeholders, including the general public and democratic process – and how effective is this?
- **Knowledge impact:** Is there an impact strategy for educational R&D in each relevant educational sector, with clear understandings of what counts as basic and applied research and of what counts as forms of development by practitioners and others – and the funding streams and organisational infrastructures to support these activities?

### **Forum I**

Forum I took place in Harrogate in October 2008. This Forum considered the questions outlined above regarding context, quality and capacity in the constituent countries. Discussions took place within country groups so that the specific context of education research in each country could be explored. These discussions were supported by country stimulus reports which were prepared in advance and offered initial analysis of the state of play in relation to quality and capacity issues in education research in each country (these reports are available to download on the SFRE website: <http://www.sfre.ac.uk/publications/forum-1/stimulus-reports/>). Discussions at the first Forum noted that while there were varied levels of provision for research production and application in different countries, there was a particularly strong common challenge around effective research dissemination and mediation. There are also obstacles in terms of the historical structure of teacher education departments in HEIs and consequential challenges in the contemporary direction of travel towards more interdisciplinary work.

The complex issue of quality in education research was tackled at Forum I in professional groups – i.e. policymakers, practitioners and researchers and in sector groups (compulsory and post-compulsory). The discussions on quality and what criteria should be used in assessing quality confirmed that, whilst there were many issues in common, particular priorities in relation to these issues were maintained by different stakeholder groups. These tensions were explored and it was obvious that, although a number of generic concerns (e.g. about theoretical and methodological robustness, or about engagement and communication) were shared across a number of contexts, no single set of criteria could be identified<sup>1</sup>. Rather, it was necessary to recognise that different types

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<sup>1</sup> A project to document in more detail such variations in views on research quality in education was subsequently commissioned by TLRP from Alis Oancea. For the outcome, see TLRP Research Briefing No 80 at: <http://www.tlrp.org/pub/research.html>.

of research had particular purposes and aims – with consequential variations in determinants of quality.

The final theme for Forum I was capacity. The overall level and distribution of researchers meant that there were concerns regarding capacity for research production in some key areas. Northern Ireland and Wales have particular issues around critical mass in some areas due to their smaller size. The effects of funding allocation mechanisms are also felt very acutely. A key capacity challenge touched upon in Forum I was the capacity of researchers to effectively disseminate and frame their work for users (policymakers and practitioners) and the capacity of users to engage with research and the research process at a deeper level. An issue relating to both capacity and quality was that there appeared to be a growing disconnection between those involved primarily with teacher education and those undertaking education research – at both individual and institutional levels.

More details of the discussions and events of the first Forum are in the report from this event (Pollard, 2008) which is available to download, alongside presentation slides, stimulus reports, and supplementary papers, on the SFRE website (see: <http://www.sfre.ac.uk/forum-1/>).

### Developments since Forum I

Since the October Forum, the outcomes of the fifth round of the Research Assessment Exercise (RAE 2008) and corresponding funding allocations were announced.

In their review of *research quality*, the Sub-Panel for Education concluded that: ‘the *quality of research* activity reported in the submissions was high and significantly improved from 2001’ (RAE, 2009). They stated: ‘it is clear that the best departments can compete on equal terms with the strongest departments anywhere in the world’. There was also growth in the range of institutions attracting quality-related funding in education, with 41 institutions achieving new funding. These outcomes suggest that the field has been significantly strengthened since 2001.

Regarding *research capacity*, the sub-panel reported:

There was evidence of significant attention being paid to capacity development. Postdoctoral fellowships, from the ESRC and other sources, have had some impact. Submissions indicated a good level of support for staff and especially for early career researchers. At a national level the development of research capacity has been strongly supported by the TLRP networks, by the ESRC more generally, and in Scotland by AERS. Clear evidence of success is demonstrated, for example, by rising numbers in quantitative research, spread among more centres.

However, in terms of the *application of research*, the panel recorded a concern. They stated:

Much government investment has explicitly been directed towards attempting to secure a stronger evidence base for decision-making in policy and practice, with a concomitant investment in research access and dissemination activities. We know that the Teaching and Learning Research Programme (TLRP) and Applied Educational Research Scheme (AERS) have supported and funded a wide variety of research-based activities and outputs for different user audiences, but we noticed that only a small proportion of these outputs seem to have been

submitted to this RAE. We accordingly wonder whether clear signals about the relationship between quality in research as measured by RAE and the greater UK investment in research-for-use have yet to be given. At this stage, it appears that the risk institutions perceive of submitting research-based user-focused outputs has led to limited submission of this work. (2009: 8)

Although the timing of the flow of publications from TLRP and AERS is likely to have been important here, these observations by the RAE sub-panel are of great significance to SFRE. They suggest that clear progress has been made on quality and capacity, but that more work is needed to establish the status of applied research within academic communities.

The funding outcome of RAE (2008) produced significant growth in the number of higher education institutions in receipt of funds but some very highly rated research institutions suffered a loss in income.

The funding councils have developed proposals for the next research assessment process – the Research Excellence Framework (REF). The weightings which are proposed<sup>2</sup> for the three components of research outputs, impact and research environment are 60 per cent, 25 per cent and 15 per cent respectively, for all disciplines. While the use of metrics in making judgments has been explored, the main mechanism will remain expert review. The proposed inclusion of impact as an explicit component has triggered dissent from some in the academy. Impact is discussed in the section below on ‘funding and research priorities’ (page 42/3).

Between Forum I and II, the planning group members from each country kept the momentum. There have been exciting developments in each of the UK countries since the first Forum. For example, Northern Ireland has created the Northern Ireland Education Research Forum which consists of representatives from each of the HEIs in Northern Ireland (Queen’s University Belfast, University of Ulster, St Mary’s University College, Stranmillis University College, Open University), the Education and Training Inspectorate (ETI) and each of the government departments involved in education (DENI, DELNI). The purpose of this forum is to build a more strategic approach to research capacity issues and evidence-informed policy more generally. The Forum meets to discuss strategic issues and share knowledge and discuss opportunities and developments in education (see: <http://www.sfre.ac.uk/northern-ireland/>). In Wales provision has been made in the remit letter to HEFCW for continuation, in some form, of the Welsh Education Research Network (WERN) (WAG, 2009). A new centre has also been funded in Wales - the Wales Institute of Social and Economic Research, Data and Methods (WISERD, see: <http://www.cardiff.ac.uk/wiserd/index.html>) – which is coordinated from Cardiff University and involves a network of Welsh HEIs (Swansea, Bangor, Glamorgan, Aberystwyth, Cardiff). WISERD is an interdisciplinary social science research centre which has a focus on building capacity across Welsh institutions (the partner HEIs and beyond) and enabling more collaborative working across disciplines and institutions. In Scotland, consultation about education research is being facilitated through Scottish Government’s Analytical Services. It involves discussions with deans of education and with users of education research. In England, DCSF has initiated a commissioning process to establish new Centres for research on education. These will have strong links to the department and are intended to enable a higher degree of engagement and co-production than previous investments. The Educational Evidence Portal (<http://www.eep.ac.uk>)

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<sup>2</sup> At the time of publication of this report, the outcomes of the consultation around the REF proposals (autumn 2009) are not known.

continues to be supported and its use is growing. ESRC has supported two pilot projects to support capacity building in England and deliberation on future provision is expected to follow. The current situation in each country is described briefly in the concluding section of this report.

**Aims of Forum II**

Forum II provided a space to discuss the provision and incentivisation of different types of research in each country and in the UK as a whole. The framework outlined in the diagram below (Figure 2) was the conceptual basis for the event programme and directly underpinned its structure.

**Figure 2: Conceptualising Forum II (Source: (Pollard, 2009)**

<b>Contextual influences</b>	<b>Purposes and typical responsibilities</b>	Is there appropriate provision and incentivisation for the production of high quality and innovative research?						
		Phil	Soc	Hist	Psy	Econ	Neuro	Policy
	<b>Disciplinary Research (International)</b>  Disciplinary knowledge production with global networks on enduring issues (typically research council funding of research-intensive universities)							
		COMPULSORY			POST-COMPULSORY			
		Child-rens Servs	School-ing	14-19	Further	Higher Ed	Adult & Com Ed	Work-place Lng
	<b>Applied Research (United Kingdom)</b>  Interdisciplinary research applied to contemporary issues (typically research council, government or charitable funding of research-intensive universities and centres)	What are the areas of best practice?  Why is that effective?  Are there particular areas of apparent weakness?  Are development strategies being considered?			What are the areas of best practice?  Why is that effective?  Are there particular areas of apparent weakness?  Are development strategies being considered?			
	<b>Development &amp; Evaluation (National)</b>  The development and evaluation of applied policy and practice initiatives (typically local and national government, charitable and private sector funding of a wider range of universities, centres and private organisations)	What are the areas of best practice?  Why is that effective?  Are there particular areas of apparent weakness?  Are development strategies being considered?			What are the areas of best practice?  Why is that effective?  Are there particular areas of apparent weakness?  Are development strategies being considered?			
<b>Practitioner research &amp; enquiry (Local)</b>	What are the areas of best practice?			What are the areas of best practice?  Why is that effective?				

	The improvement of practice and provision to enhance the quality of learning and educational services (typically local government, schools and national agency funding)	Why is that effective? Are there particular areas of apparent weakness? Are development strategies being considered?	Are there particular areas of apparent weakness? Are development strategies being considered?
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There was much discussion during the event about the definitions used in this framework. Participants recognised the value of the framework as a means of organising thoughts and discussions, but they also felt that there was often considerable overlap between ‘applied’, ‘evaluative and developmental’ and ‘practitioner’ research. It was suggested that it may be useful to consider the typology as a spectrum. Considering the influence of context on research of different types was seen as valuable. For example, practitioner research is usually undertaken at a school (or classroom) level and often (though not always) highly contextualised where findings are often only applicable in the researcher’s own context. At the other end of the spectrum sits disciplinary research which is often internationalised. Participants were more comfortable with the distinction between disciplinary<sup>3</sup> and other types – although disciplinary research could ultimately be applied, this was not the intention from the outset. Applied research however is always intended to be used (although how and by whom is not always clear).

Ahead of the Forum short contributions were prepared from a number of disciplines which contribute to the education field. These outlined the contribution a particular discipline made to education research and to interdisciplinarity. Written contributions were received from:

- Philosophy, Professor David Bridges (University of East Anglia and St Edmund’s College, Cambridge) (Bridges, 2009)
- Economics, Professor Anna Vignoles (Institute of Education, University of London) (Vignoles, 2009)
- Sociology, Professor Becky Francis (Roehampton University) (Francis, 2009)
- Social Anthropology, Dr David Mills (University of Oxford) (Mills, 2009)
- History, Professor William Richardson (University of Exeter) (Richardson, 2009)
- Neuroscience, Professor Usha Goswami (University of Cambridge) (Goswami, 2009)
- Psychology, Professor Ingrid Lunt (University of Oxford) (Lunt, 2009).

This selection of disciplines was intended to give a flavour of the wide variety of foundation disciplines upon which education research is based.

Planning group members from each of the UK countries also drafted reports which pulled together examples of applied, evaluative and developmental and practitioner research in their country and, to stimulate discussion, proposed areas for development/improvement. The disciplinary information was collated separately due to the international nature of this type of research. The country mapping reports were completed by:

<sup>3</sup> The term ‘disciplinary’ research has been used throughout this report and was chosen to replace the terms ‘pure’ and ‘basic’ research, used in earlier SFRE papers. The term ‘disciplinary’ was deemed to provide a more grounded connection with the social practices of education research and to be more appropriate for SFRE.

- England, Deborah Wilson (DCSF) and Andrew Morris (education consultant) (Wilson and Morris, 2009)
- Northern Ireland, Dr Ruth Leitch (Queen's University Belfast) and Karen McCullough (DENI) (Leitch with McCullough, 2009)
- Scotland, Dr Lorna Hamilton (University of Edinburgh) (Hamilton, 2009)
- Wales, Dr Sue Davies (Trinity University College) (Davies, 2009)
- ESRC UK overview, Professor Harry Torrance (Manchester Metropolitan University) (Torrance, 2008).

The disciplinary statements and country mappings are available to download on the SFRE website (see: <http://www.sfre.ac.uk/publications/forum-ii-publications/input-documents-for-forum-ii/>).

The event itself brought together over 70 researchers, practitioners and policymakers from each of the constituent countries and across compulsory and post-compulsory sectors. There were significant numbers of participants who had attended the first Forum in order to offer continuity but also people who had not been involved in SFRE previously in order to inject new perspectives to the event and to spread awareness of the initiative. Care was taken to ensure representation of all the countries, range of institutions/organisations and sectors. Private and not-for-profit research organisations were also invited as these organisations play a significant role in education research in the UK – particularly in some types of research (e.g. evaluative) (Pollard, 2008).

At the event discussions took place on the research types using the typology outlined above. For each research type, attendees joined one of five groups each lead by a facilitator. A plenary session followed each group discussion session in order for participants to feedback and discuss points raised in their groups with the whole Forum. After the event, the facilitator of each group wrote up the discussion from the group which they facilitated. The notes from each group are available on the SFRE website (see: <http://www.sfre.ac.uk/forum-2/>). Tom Schuller (NIACE, formerly OECD CERI) participated in the event as an external reviewer of the proceedings and John Selby (HEFCE) closed the event with his thoughts and observations (see: <http://www.sfre.ac.uk/forum-2/>).

### **Structure of the Report**

This report follows the structure of the event – looking at each research type in turn and assessing whether there is appropriate provision and incentivisation for each research type, within and across countries depending on the type of research considered. The Forum and the report also examine research funding and commissioners' research priorities - how they are derived as well as what commissioning organisations want from research. The last section reviews the work and discussions undertaken at Forum II and offers some conclusions and review of the Forum.



## Disciplinary research and interdisciplinarity

### Definition

A major focus of discussions at the Forum, as articulated in the conceptual framework outlined in Figure 2 (pp.15-16 above), was on “disciplinary knowledge production with global networks on enduring issues (typically research council funding of research-intensive universities”.

In the discussions at the Forum, there was a feeling that in one sense all disciplinary research in education is applied as everyone across education is working towards improved education. There is a core moral principle of improving lives. Disciplinary research does not set out to be used or applied (although ultimately it may be) whereas applied research has this purpose from the outset. It is important to note that more theoretical, disciplinary or pure research has its users; these are more likely in the first instance to be other researchers than they are practitioners or policymakers.

### Overview from the disciplines<sup>4</sup>

The field of education research encompasses many different disciplines. Whilst this multidisciplinaryity is a considerable strength of education research, it also poses challenges both in terms of how those outside the academy view education research and how the academic community works together across disciplinary borders. Education has been perceived as an ‘importer’ discipline (Mills *et al.*, 2006) - a term given to fields/disciplines where much of the academic staff working in the field were originally trained in another ‘feeder’ discipline. Traditionally sociology has perhaps been the main ‘feeder’ into education . However, more recently there have been exciting developments in areas such as neuroscience, which have led to new areas of education research opening up. The economics of education and associated quantitative methodologies is another growth area.

As Francis notes in her contribution to the Forum on the role of sociology in education research, over the past twenty years sociology has been the dominant foundation discipline in education research (Francis, 2009; Torrance, 2008). There have been significant contributions in relation to gender, social inequality and race inequality and particularly the transmission/reproduction of inequalities down generations – i.e. the exposing of ‘meritocratic accounts of educational outcomes as largely mythic’ (Francis, 2009: 1). Sociology of education also encompasses a large body of work critiquing education policy (see Ball, 2008). Francis suggests that ‘sociological research needs to be better attuned to the offer of constructive, as well as deconstructive, ideas’. This appears vital for the progress of dialogue between sociological research and education policy, and maximising the impact of research findings’ (Francis, 2009: 2).

Psychology is another historically strong discipline in education research. As Lunt describes in her contribution to the Forum, the relationship between psychology and education has not been without its challenges. Whilst psychology has had a strong influence on the subject matter and methodologies used in education research, many within education considered psychology to be

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<sup>4</sup> Statements on the contribution of individual disciplines, prepared for Forum II, are available on the SFRE website (<http://www.sfre.ac.uk/publications/forum-ii-publications/input-documents-for-forum-ii/>).

'individualistic, positivist in epistemology, reductionist in approach and overly concerned with measurement' (Lunt, 2009: 1). In general there is a divide between psychologists in education departments and those in psychology departments with the latter concerned with positioning psychology as a pure science.

Other disciplines important to the field of education also submitted contributions to the Forum. Richardson demonstrates the importance of historical knowledge, particularly in education policy, and the role that historians of education can fill (Richardson, 2009). For philosophy, Bridges argues that all education research is connected with philosophical thought either in that it raises philosophical issues or rests on philosophical assumptions (Bridges, 2009a).

In a review of ESRC funding for education research from 2004 to 2007, Torrance notes:

One discipline notable by its absence ... is Anthropology. This may signal a focus on policy-relevant topics and short(er) timescales ... . It is perhaps indicative of a lack of funding for (non-programme) longitudinal studies and/or lack of belief among the education research community that longer term qualitative studies will be funded. (2008: 14)

In Mills' contribution to the Forum on the contribution to education made by social anthropology, he puts forward some explanations for its past lack of engagement with education (2009). Mills highlights the lack of funding for more anthropological work due to a focus on policy research and education reform in education research. He also suggests that traditionally the discipline of anthropology does not 'fit' with the education system and schooling structure either politically or epistemologically (Mills, 2009).

Quantitative skills are developed in disciplines such as economics and psychology but are not as common in other disciplines which do not use quantitative methods as a matter of course (RAE, 2009; Torrance, 2008). In her contribution to the Forum on the role of neuroscience in education research, Goswami notes that there is a barrier to increasing quantitative skills in education research, as key disciplines which use these skills follow the scientific method – which still appears to be viewed 'in a negative light within much of education research' (2009: 1). There appears to be a tension here between views of users and researchers in terms of hierarchies of research approaches. There is a growing demand from policymakers for quantitative evidence and along with improvements in methods and increased availability of data this has contributed to the growth in the economics of education, as highlighted in Vignoles' SFRE contribution on the importance of economics in education research (Vignoles, 2009). The RAE 2008 education sub-panel noted that whilst a relatively small amount of quantitative work had been submitted, what existed 'was of very high quality' (RAE, 2009: 3). However the quantitative work undertaken within the economics of education has developed 'in parallel with quantitative education research rather than being integrated with it' (Vignoles, 2009: 2) – this may be related to the tension raised earlier regarding the traditional view of the scientific method. Education is a field which draws strength from the range of disciplines which it encompasses. In order to ensure this enables the production of the highest quality research possible, it is important that more recent developments in education such as neuroscience and economics are fully embraced and integrated (Goswami, 2009; Vignoles, 2009). More recently the availability of government administrative data to produce large datasets has been a growth area in quantitative analysis in social sciences and has in part led to the increased demand for quantitative research skills. A new ESRC NCRM (National Centre for Research Methods) research

node ADMIN (Administrative Data: Methods, Inference and Network, see: <http://www.ioe.ac.uk/research/16083.html>) at the Institute of Education, University of London brings together economists, social statisticians and other quantitative researchers to develop innovative methodologies and build capacity for fully exploiting administrative data.

**Discussion summary: Is there appropriate provision and incentivisation for the production of high quality and innovative disciplinary research?**

**Given growing awareness of the interconnectedness of education and other fields, how is interdisciplinary research supported?**

***The state of the disciplines in education research.***

In a recent edition of the Oxford Review of Education (Furlong and Lawn, 2009) describe how in their view, since the 1980s the disciplines in education have become increasingly sidelined reflecting a broader movement towards the useful and instrumental (in terms of teacher education, research, policy and practice). This has been particularly marked since the late nineties when three high-profile reports were launched criticising education research as being irrelevant (Hargreaves, 1996; Hillage *et al.*, 1998; Tooley with Darby, 1998). The drive for more ‘useful’ education research has continued to the present, exemplified in the consultation regarding the next round of research assessment – the Research Excellence Framework – which involves a judgement to the economic and social impact as well as the quality of the research (HEFCE, 2009).

Even within the academic education research community itself, there seems to be an ‘epistemological crisis of confidence’ which has contributed to ambivalence toward the disciplines for many working in the field, which was ‘particularly acute in the field of professional education – the economic base of many university departments of education’ (Furlong and Lawn, 2009: 548). The gap between practice and academic research characterised by the lack of confidence from policymakers and lack of engagement of practitioners with education research is often presented as a lack of ‘relevance’ (Bulterman-Bos, 2008). Bulterman-Bos (2008) describes the space between the researchers’ worldview and that of teachers (originally used by Labaree, 2003) through using four dichotomies. ‘The concepts *analytical, intellectual, universal, and theoretical* adequately typify the world of research. The concepts *normative, personal, particular, and experiential* typify the world of practice’ (Bulterman-Bos, 2008: 413). This is also happening in a context where there is a growing polarisation between research intensive HEIs and those primarily focused on teacher education (see report from Forum I - Pollard, 2008; Munn, 2008).

While some disciplines tend to be more closely attuned to the needs of policymakers than others, Bridges (2009b) and colleagues investigated the contribution of a wide range of types of education research to policymaking. On behalf of a group of philosophers commissioned by the TRLP to explore the epistemological basis of findings from a range of approaches to education research, Bridges makes the case for a wide range of types of research being relevant for decision makers when formulating policy and that a narrow focus on empirical studies will limit this contribution and therefore understanding of an issue. He calls on the academy to ‘not be coy’ about drawing on its intellectual resources to contribute to the debate and development of normative elements of policy.

Bridges calls for more work in terms of ‘making the case’ for a broader research base in policymaking: ‘A more inclusive approach to educational research requires a better understanding of the ways in which different kinds of enquiry can inform thinking about educational policy’ (Bridges, 2009b: 3).

While users of research may be less interested and engaged in discussions around disciplinarity and interdisciplinarity, it is important for funders and users of research to be aware of the contribution to the field as a whole even though individual research projects, programmes and outputs are likely to be multi- or interdisciplinary. The contribution of higher education to research through fostering the disciplines is crucial for the long-term development of high quality education research. There is an important role which professional researchers in higher education fill here perhaps compared to research located in private consultancies and the third sector.

**Multidisciplinarity and interdisciplinarity.** Due to the complex nature of many of the questions education research is trying to answer, it is often useful to draw on knowledge and methods from different disciplines – the majority of which are within the social sciences but also the biological sciences and statistics. One example is work on inequalities in higher education participation where economics can offer quantitative analysis of the participation gaps, but research also draws on sociological theories of social class and cultural and social capital to understand different preferences. It is perhaps less clear whether this work needed to be interdisciplinary rather than multidisciplinary. However it is unclear whether that distinction really matters – one group made the point that the distinction is often between someone who works on the interdisciplinary boundaries or a team of researchers each with a different disciplinary background – the final product may actually be the same (Taylor, 2009).

The 2006 ESRC *Demographic review of the UK social sciences* (Mills *et al.*, 2006) notes the organisational trend within HEIs towards bringing education departments under a larger social science department. This appears to match broader shifts of focus towards more interdisciplinary working and is ‘having a positive impact on cultures of collaboration and the movement of staff; strengthening cross-disciplinary communication on every level’ (Mills *et al.*, 2006: 44).

What is needed is an understanding that would build trust within the education research community. This is hard to develop as it is important to note that this is more than awareness of different methodological approaches to questions. Different disciplines have different languages, traditions and epistemological frameworks – it is more than people bringing different skills to bear on a common topic or question. It was clear from policymakers that they simply wanted the method/approach best suited to answering a specific question and were not concerned what that method was. It was also clear that researchers were best placed to answer this question. This implies some level of understanding across different disciplines and methodological approaches – but also that the researchers are clear what the policymakers want. There is a challenge in enabling and fostering understanding between researchers from different disciplinary backgrounds due to the issues described above. As one SFRE II group chaired by Margaret Brown (2009: 1) noted, ‘meeting and exploring common ground with people from other disciplines takes time’. The competitive context and the geographical spread of education departments also add to the task. Incentives to work together are not obvious and work needs to be done to demonstrate the effectiveness in doing so in terms of enhanced quality. There is therefore a need for all involved in the knowledge

development process to have an overview of different disciplinary approaches, frameworks and methodologies.

The current career structures and progression paths for professional researchers are also barriers for interdisciplinarity, as they are traditionally rooted in individual disciplines. Subject associations and networks as well as academic journals focusing on one discipline all contribute to guiding researchers towards a single-disciplinary path. Although this is starting to change there is still an 'academic risk' associated with interdisciplinary work, particularly for early career researchers yet to establish themselves in the field. Academics may feel that interdisciplinary work may mean that they have less time to stay up to date with advances in their own discipline – although as noted later, interdisciplinarity can also provide opportunities for revisiting and refreshing their engagement with underlying knowledge base of the discipline as well as contributing to it.

One suggestion was that to incentivise interdisciplinarity, this should be a prerequisite for commissioners and funders of research. However this is currently the case for many funding proposals (e.g. ESRC) and participants noted that this does also create problems. One way forward could be focusing on common questions in terms of search for increased understanding and appreciation across different disciplines. Asking genuinely interdisciplinary questions which require researchers to work together would be a key development in terms of enhancing interdisciplinarity. The Technology Enhanced Learning (TEL) phase of the Teaching and Learning Research Programme is an example of interdisciplinary work. It involves eight projects which run from 2007-2011 which look at the role of digital technologies in learning or supporting learning in both formal and informal settings. TLRP-TEL is jointly managed and funded by the ESRC and the EPSRC (Engineering and Physical Sciences Research Council). There was a requirement that all applications for funding be interdisciplinary, involving research input from both social and technological disciplines (for more information on the TLRP-TEL phase see: <http://www.tlrp.org/tel/>).

**Implications for the disciplines.** The discussion regarding the contribution of the disciplines and interdisciplinarity is located in a broader debate regarding the discipline- based approach which is currently happening in the context of developments such as the Masters in Teaching and Learning in England and researcher development initiatives. Historically, it is also worth noting that the practitioner- turned- academic also does not necessarily provide grounding in a discipline so this is not entirely a modern challenge. Teaching the disciplines in an inter-related fashion in teacher training could be useful.

Whilst support and incentives toward interdisciplinarity are welcomed it is also important to be aware of the implications for the disciplines and then what this may mean for the field. Moving away from a discipline-based approach could mean a theoretical deficit - 'disciplinary must come before interdisciplinary' (Taylor, 2009). As asked by the group chaired by John Furlong at the second Forum: 'Do the remnants of the past now only live on in the routines of method, not in the analytical strength of disciplines?' (Furlong, 2009).

Understanding and training in a discipline provide a rigorous foundation for education research so it was felt that it is important to maintain research training rooted in a particular discipline and the flow of researchers from the disciplines to education. Conversely it is probably also important (partly to support the movement of researchers towards education) for education researchers to 'feed back' and contribute to the development of their disciplines and further development of

disciplinary knowledge. In sociology there is a strong track record of this as sociology of education has been at the forefront of theoretical developments in the field (Francis, 2009). Overall the groups felt that the current emphasis on interdisciplinarity was correct but that this must not distract from the strategic importance of developing the disciplines and the important contribution they make. (See the special edition on the role of disciplines in education research of the Oxford Review of Education - Furlong and Lawn, 2009).

If the foundation disciplines are important in education research (and participants to Forum II felt they were) HEI researchers need to be clear and confident about their role and contribution to education. Does this role go beyond methodological approaches and the rigour of disciplinary research? How does the role and importance of disciplinary research vary for different uses and users? How can this be made explicit and demonstrated to different stakeholders?

#### **Further questions/outstanding issues**

- Is education moving away from a discipline-based approach? What are the implications?
- What more can researchers do to ensure that the contribution of the range of disciplines to policy and practice is recognised by users?
- Are funders and commissioners (and researchers themselves, including early-career researchers) clear about the strategic and epistemological contribution of the disciplines to education?
- Are there structures and incentives in place for substantive interdisciplinary research?

## Applied research

### Definition

Applied research was described in the framework for discussion proposed to participants at SFRE II as “interdisciplinary research applied to contemporary issues (typically research council, government or charitable funding of research-intensive universities and centres)” (see pp. 15-16, this report).

As already noted in the previous section, in some sense all education research is ‘applied’; the aim of all research in education is to improve education, whether directly and explicitly or otherwise. Although one could perhaps draw a line on the spectrum between applied and disciplinary research, it is important to note that applied research could also include significant development of theory and methodology which could feed back into disciplinary or fundamental knowledge.

One definition of applied research could be related to the notion of ‘users’ – although in the same way that all education research could be considered applied, it can be argued that all research has users whether they are other academics or politicians and teachers. A distinction between applied and disciplinary research was that whilst disciplinary research could lead to results which could be applied later this was not its primary intention. Applied research on the other hand was always intended to be used. What was often less clear was how or by whom – more attention still needed to be given to this area before and during the research process.

### Examples/ overview from countries<sup>5</sup>

From 2000 to 2009, the Teaching and Learning Research Programme (TLRP) has funded and managed a structured programme of applied research across the lifecourse covering a range of different topics. The cumulative programme budget has totalled some £43m – with major contributions from the Higher Education Funding Council for England, Government Education Departments in England, Northern Ireland, Scotland and Wales, the UK Research Councils and JISC. The overarching aim of TLRP was to support and develop educational research leading to improvements in outcomes for learners of all ages, in all sectors and contexts of education, training and lifelong learning throughout the UK. Wales and Northern Ireland have benefited more recently with the extension of TLRP which provided a funding stream to support collaboration and interdisciplinarity and could therefore act to counterweight some of the effects of competition between the small numbers of HEIs in these countries. User engagement and partnership working have been central to the aims and ambition of TLRP.

Applied Educational Research Scheme (AERS) has run in Scotland for the past five years (from 2004) and has been funded by the Scottish Government and Scottish Funding Council. Using a collaborative approach, the aim of AERS was to produce high-quality research to improve school education in Scotland, with a focus on developing the Scottish research capacity (see Brown, 2008: Hamilton, 2009). The scheme consisted of three networks which were collaborations across HEIs and schools –

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<sup>5</sup> For examples of strengths and areas for development in applied research for each UK country see the country mappings prepared for Forum II available on the SFRE website (<http://www.sfre.ac.uk/publications/forum-ii-publications/input-documents-for-forum-ii/>).

these networks were: *Learners, Learning and Teaching Network* (LLTN), *Network on School Management and Governance* (SMG) and the *Schools and Social Capital Network* (SSCN). AERS also had explicit focus on user engagement.

Collaborative centres and projects are particularly important in Wales in order to develop capacity and high-quality multi- and interdisciplinary research, partly due to the impact of the level and distribution of QR funding in Wales and the implications this has for developing a 'critical mass' of researchers in one HEI (see Davies, 2009). There are several multidisciplinary (and some cross-institutional) centres such as the Centre for Research on Bilingualism in Theory and Practice at Bangor University and the Wales Institute of Social and Economic Research, Data and Methods (WISERD) which is based at Cardiff University but works across other HEIs in Wales. Networks across HEIs are also important and TLRP funding has supported isolated clusters of researchers through various projects. The Welsh Education Research Network (WERN, see [www.wern.ac.uk](http://www.wern.ac.uk)), funded from 2007 to 2009 by the ESRC and HEFCW, links all eleven of the institutions undertaking education research in Wales in order to develop capacity through a social practices model and increased collaboration.

In Northern Ireland there is a broad range of work – both of research method and subject – taking place. Some of this has been supported by the NI extension to the TLRP such as the *Activating Children's Thinking in Northern Ireland* (ACTS) project. Examples of longitudinal work in Northern Ireland include the EPPNI (Effective Pre-school Provision in Northern Ireland, see: <http://anu.stran.ac.uk/eppni/>), linked to the EPPE (Effective Provision of Pre-School Education) project in England<sup>6</sup>, and the Youth Development Study (run by the Institute of Child Care Research and supported by the Research and Development Office) which follows 5,000 young people in Northern Ireland looking at a range of factors relating to their lives (see: <http://www.qub.ac.uk/research-centres/YDS/>).

In England applied work is funded through government departments and by research organisations and charities. The EPPE project mentioned earlier is an example of a government funded longitudinal study. Joseph Rowntree Foundation and Nuffield Foundation are significant funders in terms of the charitable contribution to applied research.

**Discussion summary: Is there appropriate provision and incentivisation for the production of high quality and innovative applied research?**

***The state of applied research.*** A danger of seeing all education research as directly applicable is that this perhaps shifts thinking towards a much more instrumental approach. Indeed, a critique of the Hillage *et al.* (1998) report and others of around the same time (Hargreaves, 1996; Tooley and Darby, 1998) (which together represented a damning view of the state of much education research – including its irrelevance) was that they had misunderstood the role and aim of much research in education (Atkinson, 2000; Sebba, 2007).

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<sup>6</sup> These two projects (EPPNI and EPPE) make up the first major UK study of effective early years provision. EPPNI and EPPE are longitudinal studies following the progress and development of 800 (NI) and 3000 (England) children from the start of pre-school in order to identify the factors which contribute to effective early learning.

Stakeholders having a narrow view of education research can lead to less innovative research particularly in applied education research. The notion of research which will be of specific use to a user may also reinforce the instrumental view of applied research and consequently narrow its scope and effectiveness. This may increasingly become the case in an era where government funds are stretched. The subject report from the RAE 2008 panel noted that whilst the best government-funded research was excellent, some of it 'suffered in quality through being too closely tied to shifting government ... priorities, tight timescales, a focus on description rather than analysis, and limited theorisation' (RAE, 2009: 3). A narrowing of what is understood by the broader education research community as applied research towards a more instrumental approach potentially leads to an overemphasis on particular types of applied research. This could mean more tightly defined applied or evaluative research projects commissioned (mainly by government departments) at the expense of other – perhaps more innovative and creative – types which are perhaps more likely to help get closer to fundamental questions in the longer term.

Related to this was the balance between reactive (to user and funder demands) and proactive (i.e., anticipating future and emerging challenges and identifying priorities) applied work. Several participants at the Forum felt that currently the tendency was too much towards reactive rather than proactive work (see for example Gardner, 2009). As discussed above this is likely to be due to the tensions between the goals, priorities and timescales of the commissioners/funders and the researchers. In this way, incentive frameworks were not always conducive to high quality applied research.

Whilst the RAE 2008 indicated that some of the best education research was applied in its orientation, there are areas of weakness which remain. Pamela Munn was the discussant for the session on applied research and noted some of these in her summary of the discussions (Munn, 2009). Weaknesses include the relative small scale nature of much applied education research with little effort being given to how the findings may be 'scaled up' to have more impact for wider audiences (Munn, 2009). There is also a role for broader dissemination and co-ordination. Co-ordinating organisations are crucial to minimise replication and waste in the knowledge management system, particularly when resources are scarce. As the co-ordinated programmes of TLRP and AERS come to an end there is a space for a body with a co-ordinating role. The systematic reviews pioneered by the EPPI-Centre (Evidence for Policy and Practice Information and Co-ordinating Centre) for example are an example of linking research to form a larger body of evidence. The RAE2008 education subject report noted the increase in evidence-based systematic reviews and described these as 'prime examples of cumulative work' which are more likely to impact on user audiences as they 'build on what has been done before' (RAE, 2009).

One group at the Forum felt that there is currently insufficient evaluative work on the impact of undertaking applied research on schools (and other settings) and on the initiatives which emanate from the research (Gardner, 2009).

There was also a concern noted that the potential of investing more in larger-scale longitudinal work had not been fully explored (Gardner, 2009). Whilst there is considerable longitudinal work being undertaken in Northern Ireland and England, there is not in Wales and Scotland.

**What does high quality applied research look like?**

- A) Foundations in disciplines – (method and theory).** High quality applied research generally requires firm foundations in the disciplines (though obviously this does not mean it needs to take place in a university) and by not always recognising this there was a real threat here in terms of the quality of much applied research. High quality applied research should be informed by theory and should be characterised by methodological rigour as much as other types of education research. Applied research is concerned with solving a practical problem and therefore usually demands an interdisciplinary approach. A discussion of interdisciplinarity can be found in the section above.
- B) Communication and dissemination.** Communication is a key component of applied research throughout the process of planning and conducting the research, as well as in the dissemination. There is room for improvement in communication between researcher and user groups. Knowledge application and impact will be discussed at Forum III, planned for March 2010. One discussion group at Forum II noted that ‘the policymaker/researcher interface still lacks a positive and mutually beneficial platform’ (Gardner, 2009: 1). As highlighted by Sebba (2007), researchers often consider the research report as just the beginning, whereas commissioners see this report as the answer to the problem they were interested in.

In terms of broader dissemination to users there is space for intermediary organisations between the researchers and the users. This component of the knowledge management system will be discussed in detail in Forum III but it is worth highlighting here that the use of intermediary organisations is potentially a more successful (and necessary) strategy than encouraging osmosis between researcher and user worlds. The EPPI-Centre can be viewed in this way as it provides an intermediary role between primary research and users. The EPPI-Centre was set up to address a policy need as well as evolving from theory around knowledge accumulation and transfer (Oakley, 2003; Cordingley, 2009). A key motivation for establishing the EPPI-Centre was improving accessibility of research outputs for policymaker and later practitioner audiences with non-technical summaries often written by users provided alongside the full technical reviews.

The purpose of applied research needs to be clear for all involved (researchers, funder, users) from the beginning of the project. Often much time is spent on agreeing and developing research methods and the purpose of the research is less defined – who or what is the research for? Munn notes that different end uses would result in different kinds of plans for research findings (2009).

Dissemination in applied research needs to be considered from the beginning of a research project and realistic budgetary considerations built in – ESRC requirements here are welcome (ESRC, 2009a). Some responsibility for dissemination rests with researchers – this includes developing their understanding of the processes about how research evidence impacts on policy and practice and how to influence them but also through employing dissemination strategies that go further than presenting at academic conferences and publishing in academic journals.

**C) User engagement.** User engagement is about more than effective dissemination of findings. A TLRP seminar explored the role of users in the research process (see Edwards *et al.*, 2009). Edwards *et al.* describe the challenges in effective user engagement such as implications for project management, differing timescales and changing project objectives, however they also show how quality of the research is enhanced. User engagement should be built in from the very beginning of the project and could involve two phases:

The first is close engagement with practice-based co-researchers to ensure that research reflects current and emergent priorities and is accessible and useful to practitioners during the research process. The second occurs once the study is completed, when user warrant strengthens research claims in policy communities and researchers need to allocate time to making findings accessible to these communities. (Edwards *et al.*, 2009: 3)

Ways forward to improve (quality and innovation) applied research are around practitioners, policymakers and researchers working together more closely, in order to foster greater understanding, trust and appreciation. One suggestion from the discussion group chaired by Paul Ashwin considered the power of researchers, practitioners and policymakers coming together to bring together a range of studies in an area and to 'recontextualise' them in order to bring out the implications for policy and practice as a type of brokerage or mediating activity (Ashwin, 2009). Could it be that the perspectives of different groups of stakeholders are too far apart for this to happen effectively as a matter of course/organically? An activity of this type would not be a trivial undertaking and would therefore require significant resource. Is there a role for specialists in this area working in dedicated centres? Public policy schools based on the US model could be a way of creating such specialists, albeit a long-term solution. Research use is due to be discussed in Forum III (see SFRE website for more information: [www.sfre.ac.uk](http://www.sfre.ac.uk)).

TLRP has raised awareness of the importance of user involvement by including specific reference to user involvement in funding proposals. In applied research, involvement of users from the beginning of the research process is likely to increase quality of the research and outputs as research questions and findings can be honed to be most relevant and engaging for the users. User engagement can also support the research being 'used' partly as users will be aware that it exists but also in that they are also likely to have more buy-in to the process and the project as a whole.

It is also worth noting that the ultimate 'users' of policy-oriented research are often individuals within government departments. Analysts often have similar challenges to researchers in terms of ensuring research findings are given the consideration they deserve in policy decisions.

**Future sustainability.** Discussions at the Forum were supportive of programmes focused on applied research such as AERS in Scotland and the UK-wide TLRP but there was concern regarding what would take their place as both programmes are currently winding up (Menter, 2009). It was felt that there was a serious risk in terms of applied research provision if consideration was not given to the

lack of funding for this area as these programmes ended, particularly in a time where all resources are stretched. It was felt that there was a need to think innovatively about future sources of funding for applied research as it was noted by one group at the Forum that education researchers had perhaps become overly dependent on programmes such as AERS and TLRP (Menter, 2009). While government are likely to fund applied research, the scale and scope of this work is often more restricted than research funded through other bodies (as described above). In Scotland the funding and the strategic overview of research is to be devolved from national level to 32 local councils (Hamilton, 2009). There is a danger that without the correct safeguards in place this development may work against the collaborative working and capacity building which has been build through AERS. In turn this may have a negative impact on applied research quality in Scotland (Hamilton, 2009).

### Further questions/ outstanding issues

- How can funding and commissioning structures be aligned to better support a broader understanding of applied research in order to enable more innovative, proactive and forward looking research?
- How can more innovative thinking about dissemination be fostered in order to ensure that research has genuine impact on practice? This could involve a deeper engagement – with all funders and researchers – at the outset and throughout the research process. Impact plans, as required in ESRC proposals, are useful in this in that they force researchers to consider dissemination and user engagement from the beginning of the research.
- How can the work of SFRE be built on to move beyond disagreements over different perspectives in order to develop a shared understanding between users and producers of research? How can the gap between researchers and users be bridged? Should there be more formal/explicit reliance on ‘bridging’ or intermediary organisations (or units within research/user organisations) to bridge the gap? Forum III will return to these issues (<http://www.sfre.ac.uk/forum-3/>).

## Evaluative and developmental research

### Definition

Participants at Forum II were invited to discuss research that aimed to inform directly “the development and evaluation of applied policy and practice initiatives (typically local and national government, charitable and private sector funding of a wider range of universities, centres and private organisations)” (see Figure 2, pp. 15-16).

Developmental and evaluative work describes a type of research which is perhaps closer to practice than the types of research mentioned above. Developmental research (or R&D) usually involves working closely with practitioners, often in an iterative way, to develop resources and approaches to improve teaching and learning. Evaluative research describes research projects which undertake an evaluation of a particular practice or policy and can be undertaken on a range of scales from evaluation of a school-level intervention to a national large-scale policy/pilot. Evaluative research often involves systematic assessment of the effectiveness of an intervention or programme in terms of achieving the desired outcome (or process). In general evaluative and developmental research in the UK is funded mostly by government departments (or related bodies) or charitable foundations.

### Examples/ overview from countries<sup>7</sup>

In England the evaluation of the Education Maintenance Allowance pilot is often referred to in terms of a rigorous evaluation which was relatively well planned and had considerable impact (for all the reports see: <http://www.ifs.org.uk/projects/98>).

The Institute for Effective Education (IEE, see: [www.york.ac.uk/iee](http://www.york.ac.uk/iee)) has recently been established at the University of York which develops and evaluates effective education programmes with a focus on randomised-control trials. IEE also manages the Best Evidence Encyclopaedia UK (BEE UK) which provides information regarding the weight of evidence supporting the effectiveness of different education programmes ([www.bestevidence.org.uk](http://www.bestevidence.org.uk)). The IEE (in collaboration with other colleagues) is also undertaking the national evaluation of the *Every Child Counts* initiative, which is taking a randomised trial approach in order to establish the effectiveness of the programme (for more information see: [http://www.york.ac.uk/iee/research/t\\_every\\_child\\_counts.htm](http://www.york.ac.uk/iee/research/t_every_child_counts.htm)).

The Welsh Assembly Government has used reviews of research and practice to inform policy (Davies, 2009). Notable examples which have had considerable impact are the Daugherty Review of statutory assessment (Daugherty *et al.*, 2004), the two Rees Reviews of student fees (Rees, 2001; 2005) and the Furlong Review of initial teacher training provision (Furlong *et al.*, 2006).

As a result of the nature of the organisation and history of academic education research in Wales, there is a lot of developmental and evaluative work which takes place between researchers and

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<sup>7</sup> For examples of strengths and areas for development in evaluative/developmental research for each UK country see the country mappings prepared for Forum II available on the SFRE website (<http://www.sfre.ac.uk/publications/forum-ii-publications/input-documents-for-forum-ii/>).

practitioners at a local level due to the experience and skills of many researchers in teaching-focused institutions (see Davies, 2009 for examples).

In Northern Ireland, the recently established Centre for Effective Education (CEE) (which grew out of the NFER@Queen's centre) has been an important development in the area of evaluation and developmental research. The CEE is an 'applied and interdisciplinary research centre committed to improving outcomes for children and young people by ensuring that the design, delivery and evaluation of educational programmes and interventions are informed by the best available evidence' (<http://www.qub.ac.uk/schools/SchoolofEducation/CentreforEffectiveEducation/>). (For more on CEE and its projects see the Northern Ireland input report for Forum II – Leitch with McCullough, 2009).

The *Schools of Ambition* initiative is a Scottish Government programme of school improvement through practitioner research which was launched in 2005 (see: <http://www.ltscotland.org.uk/schoolsofambition/>). The schools implemented interventions from their transformative plans and school-based collaborative enquiry was used to evaluate and develop their effectiveness and potential. The central activity in *Schools of Ambition* is described in the practitioner-research section below. There was also an important formative evaluative element so that lessons learned from the 52 *Schools of Ambition* could be used to develop the interventions as part of the action research cycle and to inform similar activity across Scottish schools (Hulme and Menter, 2008). Teacher evaluators are supported by university researchers (from Universities of Glasgow, Aberdeen and Strathclyde). The team works together to design research evaluation strategies to evaluation the interventions carried out as part of the school's transformative plan. University researchers also provide feedback on the process and activities undertaken for stakeholders.

The Future Learning and Teaching (FLaT) Programme (see: <http://www.flatprojects.org.uk/>) allowed practitioners in schools and local authorities to gain funding to run innovative pilot projects which challenged current thinking in teaching and learning. The programme included projects on a wide range of topics, from assessment for learning to school design. All of these projects (above a certain funding level) were evaluated by researchers with a view to provide feedback to the Executive Board and to provide formative feedback to schools and local authorities in terms of impacts on teaching and learning.

**Discussion summary: Is there appropriate provision and incentivisation for the production of high quality and innovative evaluative and developmental research?**

***State of evaluative and developmental research.*** Evaluations in education are a growth area, particularly in government-commissioned research. A considerable industry – often outside HE – has developed to meet this demand. Companies and not-for-profits organisations outside of HE, such as York Consulting, PwC, Ipsos Mori, NFER etc, are winning significant proportions of the contracts in this area.

In Northern Ireland for example, in 2002, the percentage expenditure on research and evaluation by the Department of Education was 80 per cent (academic research) and 20 per cent (consultancy)

whereas by 2005, this market-share had changed dramatically to 37 per cent (academic) and 63 per cent (consultancy) (Leitch, 2008). Examples of developmental and evaluative work happening outside of HEIs include: the development of an online curriculum planning tool undertaken by Miller Research (Wales), the academy schools five year evaluation by PwC (England), the evaluation of Aimhigher by NFER (England), and the evaluation of the (ETI) Inspection Process in Northern Ireland by PwC.

There are several reasons which contribute to this. Firstly, the growth in spending on evaluation and consultancy work has meant that it is viable for organisations to develop specialist teams. Secondly, the timescales involved often mean that private organisations are better equipped to respond to tenders for evaluations. Also, the lack of value placed on developmental and evaluative work in the RAE means that there are incentives for HE researchers not to spend their time working in these areas. This last point relates to traditional hierarchies in types of research (or: what counts as research) and is discussed in the next section. There can also be concerns relating to what the evaluation will be used for, which can have implications for the researchers involved and their reputation.

Developmental and evaluative research describes a large range of activities in the UK in terms of scale, methodology, purpose and who undertakes it. There are government-commissioned nationwide pilots through to small-scale developmental projects involving a few teachers.

One group at the Forum asked whether evaluative and developmental work can add to the sum of human knowledge about education (Anderson, 2009). The group felt that it could but that this depends on how well it is designed. In terms of Stokes' interpretation of Pasteur's quadrant of research typologies (see Figure 3), a well designed evaluation can move a study from 'pure-applied' to 'use-inspired basic'. This discussion reflects a broader debate regarding whether this type of work 'counts' as research.

**Figure 3: Pasteur's quadrant**

Research is inspired by:

		Considerations of use?	
		No	Yes
Quest for fundamental understanding?	Yes	Pure basic (Bohr)	Use-inspired basic (Pasteur)
	No		Pure applied (Edison)

Source: (Stokes, 1997)

Historically, developmental and evaluative research does not rate highly in hierarchies of research types, perhaps due to the wide range of work found in this area. Evaluative and developmental work is in general not rated highly in terms of the RAE and as described above, a significant proportion takes place outside of HEIs. In considering aspects of quality in applied research, Oancea and Furlong

(2005) note that a multidimensional approach should be taken and that applying undiscerningly the same criteria used for disciplinary research is problematic (also see Forum I report, Pollard, 2008).

Whether one considers the contribution made by evaluative and developmental work as research or not, it is harder to dispute that development and evaluative research is different to other types of research previously discussed here, mainly due to differences in their purpose. Due to this, making judgements on much of what is termed developmental or evaluative research is difficult. It is useful to consider the discussions held at SFRE Forum I on quality and the range of criteria used to consider different types of research or research for different purposes (Pollard, 2008).

Considering the underlying purpose is use (in some form), a key consideration is fitness-for-purpose. Evaluations are commissioned for a variety of different reasons, for example: because of contractual obligation; because organisations need to 'be seen' to evaluate; to gain formative feedback on an initiative or intervention; to legitimate a continuing policy; to legitimate cutting an intervention; to obtain quantitative measures of causal effects due to an intervention. Some participants at the Forum had concerns regarding whether some evaluations and pilots are undertaken because there is a policy of evaluating initiatives rather than a genuine desire for an evidence-providing investigation to inform decision making (Rodger, 2009). Others stated that some evaluations were undertaken as an audit-type tick box activity (Greatorex, 2009). The differing reasons which commissioners have for commissioning an evaluation are associated with different levels of resources allocated and with different levels of freedom over the approach taken, avenues explored and editorial rights – all of which can have implications for quality as well as potential risk of the academic record of the researcher.

### ***Quality in developmental and evaluative research.***

There has been much debate over the value and use of randomised controlled trials in evaluative research initiated by expansion in the use of trials in the US due to the 2001 ruling which declared that all Title 1 (No Child Left Behind Act – US Congress, 2001) spending on education initiatives needed to be supported by “rigorous, systematic and objective procedures to obtain valid knowledge,” which includes research that “is evaluated using experimental or quasi-experimental designs,” preferably with random assignment’ (Slavin, 2002: 15; Shavelson and Towne, 2002; Towne *et al.*, 2004). In Northern Ireland, the Centre for Effective Education has developed considerable expertise in designing and running RCTs and is thought to be leading the way in this field this side of the Atlantic (Leitch with McCullough, 2009). Whilst trials undoubtedly have a role in education research it is important to appreciate that a range of methods and rigorously applied processes is likely to provide the greatest depth of understanding.

For the full potential of evaluations to be achieved there was a need to consider the evaluation design alongside the intervention/initiative design and to extend the evaluation funding for longer than the length of the project. The time scales of an evaluation must be appropriate for the intervention being evaluated. As Anderson notes in the summary of the discussion group he chaired at the Forum, this would lead to a ‘*video* of the development dynamic’ rather than research which is ‘seen as *quick and dirty* at worst and at best a *snapshot* of a project in time’ (Anderson, 2009: 1). Group discussions at the Forum were clear that in order to achieve high quality evaluations it is

important to have the evaluation built in and planned from the outset (ideally before the intervention begins) and to be clear about the precise question to be investigated (Anderson, 2009).

There can be negative effects on the quality of the evaluation where the impacts of the research are known to be high stakes – such as ending a particular initiative – as the research team can feel under considerable pressure to offer a favourable report – particularly where the initiative is considered by the researcher so have considerable positive effects which are not picked up in the evaluation due to narrow scope. Perhaps related to this, is the impact of evaluations on policy, which is considered to be variable and not always sufficient, as one group at the Forum noted (Greatorex, 2009). However increasingly government commissioned evaluations do contribute to policy change and in this sense can be considered effective.

***Current challenges in promoting and incentivising quality.***

- A) *Scaling up and building on existing knowledge.*** It was also felt the evaluations are often undertaken as stand-alone projects and that this may not be efficient. By finding a way of building a body of knowledge around evaluations, time and intellectual labour would be saved. This wider context could counter the tendency to build up many small evaluations in isolation. Related to this however is the fact that not all evaluations are made publically available by funders. It was felt that some evaluations were undertaken for the sake of it rather than real need – i.e. evaluations of similar schemes. One group felt that there is a considerable body of knowledge on evaluation techniques (e.g. the CIPP model, see: Stufflebeam and Shrinkfield (2007)) which is not always tapped into (Greatorex, 2009).
- B) *Commissioning the appropriate evaluation.*** There was concern among some groups that in some evaluations there was not sufficient consideration given by commissioners and researchers before the project begins (ideally before the intervention begins) to ensure that the correct question is being asked and that all involved are working towards the same aim (Greatorex, 2009; Anderson, 2009). One group felt that there was less knowledge among commissioners (and policymakers) regarding qualitative evaluative methodologies and a feeling that quantitative methods provided a higher quality evaluation (Bohrer, 2009). More capacity building in these areas may be useful to increase understanding regarding the strengths and weaknesses of different types of research. High quality evaluative studies required a range of integrated research skills/methods and perhaps more capacity building was needed in developing qualitative evaluation methods. The tendering process for evaluations may also stifle innovation in evaluation methods, such as light touch and bottom-up practitioner-driven evaluations (Greatorex, 2009; Rodger, 2009).
- C) *Contractual complexities/relationships.*** Relationships can be harder than with other types of research as commissioners often have a clearer idea of what they expect from the work and even what they would want it to say. In summarising discussions from this session at the Forum, Sebba asked: have funders decided outcomes before they start? (Sebba, 2009).

Communication between commissioner and research is crucial from the beginning to ensure a shared understanding of the specific question being asked and the purpose of the

research. Researchers and users working together is more likely to lead to high impact. This also will help ensure that the evaluation report is written in the most useful style for the commissioner.

#### **Further questions/ outstanding issues**

- How explicit were the boundaries of the project at the beginning? Was there scope for the researcher to assess/critique the underlying aims of the initiative? (Perhaps this is easier with charities than government departments).
- If HEIs want to compete with other research organisations in this area of research, they may need to explore developing centres which focus on evaluative projects and models. Perhaps there is more potential in collaborations between HEIs and research organisations in this area than currently being explored.
- As funding for research, and social science research in particular, is likely to be increasingly squeezed, will there be pressure to undertake proportionally more instrumental developmental and evaluative research at the expense of other types of research? Should there be fewer but better evaluations commissioned?
- Should evaluations hold more value in terms of the REF? If so, how?

## Practitioner research and enquiry

### Definition

The operational framework of Forum II conceptualised practitioner research and enquiry as the type of research carried out in a local context for “the improvement of practice and provision to enhance the quality of learning and educational services (typically local government, schools and national agency funding)”.

As discussed above, there are overlaps between practitioner and applied research. We could draw a line between the two by defining applied research as being undertaken by a professional researcher. It is also interesting to highlight that practitioner research covers a broad spectrum of research ‘types’ and levels of formality. EdD’s are often highly academic, rooted in the disciplines and are accessed by academic standards in HEIs, whereas small-scale action research undertaken by an individual teacher or a department may often be highly contextualised.

### Examples/ overview from countries<sup>8</sup>

In England the Teacher Learning Academy, which is was set up by the GTCE, has a strong focus on practitioner research as a means of professional development. As part of the TLA, teachers undertake an enquiry project based around their own practice. An evaluation of the impact of the TLA has shown positive impacts which are sustained and broader than the individual teacher involved (Lord *et al.*, 2009).

The National Teacher Research Panel is a network which provides advice and support for teachers, supported by DCSF, GTCE, NCSL and LSIS and run by CUREE (<http://www.standards.dfes.gov.uk/ntrp/>). Its purpose is to increase the involvement of teachers in research in terms of teacher engagement in research project and teachers undertaking their own research.

In FE, LSIS funds projects through the Excellence, Innovation and Improvement Programme. This fund includes a range of different opportunities for practitioner research. Project outcomes are shared with the sector through the Excellence Gateway, and may be supplemented by further publication opportunities and dissemination events. While there is less visible evidence of practitioner research in compulsory education rather than post compulsory, one participant cautioned of trying to assess the level of research activity in the sector as some became ‘invisible’ if labelled as ‘pedagogic’ research (Hyland, 2009).

The majority of funding for practitioner research in Wales is through the GTCW. Continued Professional Development awards have been offered since 2001. The offer has changed over the years but whilst the work produced using the initial Teacher Research Scholarships were judged to

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<sup>8</sup> For examples of strengths and areas for development in practitioner research for each UK country see the country mappings prepared for Forum II available on the SFRE website (<http://www.sfre.ac.uk/publications/forum-ii-publications/input-documents-for-forum-ii/>).

be high quality there is some evidence to suggest that more recently standards have fallen (see Davies, 2009). Chartered Teacher Status is also being piloted in Wales.

In Northern Ireland, as in Wales, the principal supporter of practitioner research in the compulsory sector is the General Teaching Council through professional development grants. The GTCNI has also developed the Access to Research Resources for Teachers Space (ARRTS) which provides a digital repository for practitioner research (Leitch with McCullough, 2009). In the lifelong learning sector there has been a lack of co-ordinated practitioner work. Recently DELNI with the Learning and Skills Development Agency (LSDANI) has supported practitioner research in the post-compulsory sector as part of the Essential Skills strategy though despite best efforts this work has struggled to have impact or gain recognition (Leitch with McCullough, 2009).

Scotland has a strong history of practitioner research and there is a strong focus on practitioner research in professional development (Hulme and Menter, 2008; Kirkwood and Christie, 2006). Expectations that teachers will be engaged with research to inform their practice are reflected in criteria which teachers are required to meet through each stage of their training and development, from initial teacher training through to Chartered Teacher Status. For example, the Standard for Initial Teacher Education states that teachers should have a core professional interest in 'using research and other forms of valid evidence to inform choice, change and priorities in promoting educational practices and progress' (GTCS, 2006: 3) and this is communicated through the professional standards described in 2.4 'Professional reflection and communication' (GTCS, 2006: 14). Chartered Teacher Status develops the awareness and engagement with research described in the ITE standard with one of the four central professional values is commitment to 'Critical self-evaluation and development' (GTCS, 2009: 3, Standard 1.2). Other criteria expect that the Chartered Teacher consistently 'articulates a personal, independent and critical stance in relation to contrasting perspectives on educational issues, policies and developments' (GTCS, 2009: 7, Standard 4.1.2) and 'ensures that practice is informed by reading and research' (GTCS, 2009: 8, Standard 4.2.2).

**Discussion summary: Is there appropriate provision and incentivisation for the production of high quality and innovative practitioner research and enquiry?**

***The role of practitioner research.*** Action research, at its most informal, can be described as the activity of a reflective practitioner, although for some action research needs to be collaborative. Activities which could be described as a form of action research are traditionally embedded in the teaching profession - although there is still further to go. As many teachers feel they are working within centrally mandated frameworks which encourage a technician approach (particularly in England), the recent moves across the UK towards enhancing professionalism are welcomed. These developments include the new curriculum in NI, the Chartered Teacher programme in Scotland and the Masters in Teaching and Learning in England appear to represent moves in the right direction, linking practitioners with HEIs. These initiatives may also lead to more time available for practitioners to engage in research. Currently this is considered a central barrier and one which was noted by several participants at the Forum (see for example Beckett, 2009; Hyland 2009).

The potential benefits of high-quality practitioner research are numerous – the current challenge is to ensure that the full potential of these benefits is reached. Benefits identified by the discussion group chaired by Lesley Saunders at Forum II include:

- contribution towards an evidence base about teaching and learning
- identification and dissemination of best practice – or rather (since many did not like that term) quality of practice
- detailed description of innovations in particular real-life contexts
- contribution to the theorisation of teaching and learning
- deepening, even transformation, of individual practitioners' thinking and practice – i.e. practitioner research as 'powerful pedagogic process'.
- (re-)empowerment of practitioners as leaders of teaching and learning, enhancement of professional identity and sense of agency.
- the creation of good stories (about enquiry and improvement). (Saunders, 2009)

**Quality in practitioner research.** Mills *et al.* note:

And for those [practitioners] moving in [to academia] temporarily, the bulk of research continues to be qualitative, small-scale and of personal interest. In addition, practice-based research tends to 'disappear', rarely reaching peer-reviewed journals' (2006: 45). 'There is a shortage of methodological skills amongst practitioner researchers, and space for improving communication between practitioners and researchers (2006: 45).

The quality of practitioner research is variable but much of this depends upon which criteria quality is judged (Pollard, 2008; Oancea and Furlong, 2005). Academic criteria may not be the only relevant criteria. It is important not to equate informal localised research with poor quality research. One question raised by the group chaired by Fiona Hyland at the Forum was whether research for practitioner development and research for 'new knowledge' required different types of support (Hyland, 2009). The range of activity which can be described as practitioner research makes judgements of quality and even quality difficult.

**Bridging the gulf between research and teaching.** Separation of research-intensive and teacher education-intensive HEIs and staff within those HEIs is a problem for both teachers wishing to engage with leading academic research and researchers searching for better engagement with practitioners in their work (Munn, 2008). Involvement of higher education researchers in practitioner research means that data collected can be used in both academic as well as practitioner research (Isham, 2009). The most recent RAE and associated funding allocations may begin to alleviate some of the unintended consequences of previous funding decisions.

Comparisons are often made between the medical and education professions. Recently Professor Jonathan Shepherd highlighted the wider gap between researchers and practitioners in education and criminology as academics in these fields tend to stop practising – 'Contrast that with health. If you're a lecturer in a department of surgery or a dental school, you keep practicing. The huge advantage is you have your feet on the ground. Your clinical practice informs your research and research informs your practice' (Shepherd quoted in Henderson, 2009). A closer relationship between research and practice would be beneficial in terms of connecting the action researcher and their research to the knowledge base (and research methods) and working concurrently to promote

research-informed practice. Incentives for academics in terms of RAE for example are not aligned with researcher engagement with practitioner research (Beckett, 2009; Hyland, 2009).

Practitioner research by definition is often highly contextualised and therefore school or even classroom specific. Analysing the contextual drivers and drawing out implications and understandings which are useful in less local settings is perhaps a role which researchers could facilitate (due to their more objective role and as professional researchers). The incentives for practitioners to engage in this type of activity – i.e. broadening their work and experience – are not particularly strong and are only likely to take place where enforced (i.e. the practitioner is studying for a formal qualification such as an EdD). Researcher/ practitioner engagement in general is a complex relationship and the connection to the knowledge base and methods needed to develop practitioner enquiry often depends on this relationship.

**Maximising the potential.** A significant challenge is providing a structure or framework (or network) which would enable appropriate/relevant practitioner research and researchers to link together. Whilst some more formal research (such as EdD theses) are more closely connected to the existing knowledge base, there is still more work which could be done in this area – one idea is discussed below. Mills *et al.* (2006) note that the numbers undertaking Professional Doctorates have grown significantly. However Mills also comments that these programmes ‘are chiefly taken up as a means of career advancement, and can be undertaken part-time with the practitioner still being school-based. Such people are rarely drawn wholesale into the research community’ (Mills *et al.*, 2006: 45). Moving along the spectrum, there is huge amounts of work happening in schools and colleges which is ‘beneath the radar’ of many knowledge management systems or structures. To really use the current work happening at this local level, work needs to be done to connect practitioners, and their work, to higher-level networks and structures. This needs to happen at many levels and some of the hardest challenges will be much deeper than practical networks and will involve incentivising organic relationship building and learning.

One element of this is purely practical – providing an online repository (or something equivalent) which would enable a database (with some coding) to develop. One straightforward step would be to digitalise (and make easily accessible) UK EdD theses. The success of such activities depends on contexts and cultures of the communities of practice. Previous attempts by the then TTA in England to collate and disseminate practitioner research were not successful (TTA, n.d.). However, documenting and linking up practitioner research will help reduce the repetition or ‘re-inventing the wheel’ which currently takes place (Hyland, 2009). Bringing all teacher research together online could be an important first step but it will not necessarily mean that teachers will engage with it and ultimately practice will improve. Scotland seems to have practitioner research embedded as a central part of professionalism, relating to the idea of reflecting on and improving practice. In other areas moves towards this (such as the MTL) are welcomed and if these are successful they could create the sea change which is needed to see research contributing to significant improvements in practice.

Due to the highly contextualised nature of much practitioner research by definition, there are still considerable obstacles before a resource would be created which contains evidence for strategies which could be applied to other contexts. It may be possible to develop thematic overviews of areas which have significant coverage which could make the research more accessible and perhaps more

useful for users<sup>9</sup>. Participants at the conference noted that practitioner research by its nature is not able to contribute to national agendas due to the local and contextualised nature of knowledge created, but that there were other ways practitioner research could be 'useful' beyond its own specific context such as through meta analysis of individual practitioner research projects (Saunders, 2009). Other ideas included 'using practitioner research projects to test and develop proposed educational initiatives before they are implemented on a national scale' and 'deepening and critiquing the evidence from large-scale work with local case studies' (Saunders, 2009: 2) – an example of which is Cambridge Assessment using practitioner research as a vehicle for testing assessment policies (Isham, 2009). The group chaired by Colin Isham shared the view that practitioner research did not directly impact on policy but also reminded us that channels to do so do exist such as the National Teacher Research Panel and the LSIS research programme (Isham, 2009). Two groups at the Forum noted that the issues chosen by practitioners to research could also be of considerable use to researchers and policymakers by elucidating the key challenges faced on the front line (Isham, 2009; Saunders, 2009).

Horizontal networks between practitioners are also likely to be important in terms of exploiting the potential of practitioner research as osmosis of ideas between practitioners is likely to be more effective than ideas and findings which have been translated to a higher level network and back down again from a central body. Incentives for practitioners to engage in disseminating ideas and networking projects do exist, but these opportunities only involve small numbers of practitioners.

#### **Further questions/ outstanding issues**

- Should there be more incentives to encourage researchers to continue to practice as is the norm in medical professions?
- Despite initiatives across the four countries such as the LSIS Excellence and Innovation programme, there is still an imbalance in favour of schools research rather than in the post compulsory sector. Whilst this is true across the research types it seems particularly evident in terms of practitioner research. What can be done to address this?
- Are online and e-learning developments being fully exploited in terms of practitioner research, in particular in connecting practitioners to the research base and facilitating training in research methods? Would an online, accessible database of EdD theses add value? If so, how can this more effectively be achieved?

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<sup>9</sup> We thank William Richardson and Ingrid Lunt for these observations.

## Research funding and priorities

Discussions at the Forum on research priorities, perhaps understandably, focused on the related area of research funding. The emphasis here is on specific research projects and programmes which are funded through application to grants or through tendering processes, however much of the discussion of impact and quality is also relevant in terms of research block funding received through the funding councils not attached to particular projects, as funding amounts are determined by assessments made regarding the quality of the research in a HEI (for more on research assessment mechanisms see the report from the first Forum: Pollard, 2008). This section is based on contributions made during the Forum from funders from different countries and different types of organisations<sup>10</sup>. These contributions form examples in the text below.

Education research in the UK is funded through various channels. The funding councils and the research councils are the largest contributors although significant amounts of grants come from government departments (and associated agencies), charities and foundations. In terms of large public commissioners of research such as the research councils, the funding councils and government departments, research priorities stem from the organisation's strategic priorities.

### *Research priorities*

To a certain extent research priorities for many organisations are influenced by the government as they are in one sense the intended audience or ultimate funder of much education research. Non-Departmental Government Bodies and associated agencies, and related lobby bodies such as the LGA discussed above base their research priorities closely on those dictated by central government. To a lesser extent charitable bodies and foundations are likely to be influenced in part by political priorities as in order to have impact (at least in terms of policy impact) research needs to be attuned to government priorities. (Although this is less important for the considerable amount of research aimed at improving practice directly – e.g. work on pedagogy development). The funding councils are at arm's length from government and whilst the government does not have a direct role in their priority setting, each country's education department sets the overarching agenda through their remit letter to their country's council.

#### **a) Funding councils**

Funding councils constitute one side of the dual support funding system operational in UK HEIs. Much of the funding delivered through the funding councils is distributed on the basis of individual institutions' scores in the Research Assessment Exercise (RAE) (now REF) (see SFRE Forum I Report). However there are also other (smaller) funding streams available through funding councils based around strategic priorities.

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<sup>10</sup> We would like to thank the contributors to this section at the Forum – namely, Adrian Alsop (ESRC), Chris Owen (WAG), Stuart Fancey (Scottish Funding Council), Karen Whitby (CfBT Education Trust) and David Pye (LGA).

In Scotland for example the Scottish Funding Council (SFC) distributes approximately 10 per cent of its annual funding through its Horizon Fund for Universities. This funding is competitive and specifically for delivery aligned to Scottish Government priorities which includes 'World Class Research' (Fancey, 2009).

'Research pooling' is being developed in Scotland in various fields. In the twilight of the AERS programme with its existing intra-institution research groups, research pools could spread to the education field. David Gani - Director of Research, Innovation and Global Engagement at the SFC - acknowledges that to 'convince universities to share hard won resources – and ultimately be prepared to share sovereignty of their research assets – the balance between cost and benefit would have to swing decisively in favour of the later' (Gani, 2008). In an economic recession where investment in research is under pressure it is going to become increasingly important to collaborate across HEIs to maintain standards. Funding pressures will necessitate partnerships and this is a central theme of the Scottish Funding Council's strategy. At the Forum Stuart Fancey highlighted the importance of collaboration and partnership (with funders, researchers, users and practitioners) in what he described as 'demand-led user engaged collaboration' in order to maximise value and innovation (Fancey, 2009).

#### **b) Research councils**

Research councils provide the other side of the dual support system in the UK through funding specific projects, programmes and centres. Adrian Alsop from the Economic and Social Research Council (ESRC) presented at the Forum (Alsop, 2009). The ESRC is the main research council for education research in the UK. The ESRC is currently encouraging interdisciplinarity, innovation and impact. Perhaps more than other funders, research councils traditionally have had a greater interest in theory and pure research. Alsop sees the fact that education research draws on a range of disciplines as a strength and notes that funders rarely see priorities in disciplinary teams (Alsop, 2009). In terms of innovation it is important to note that different funders are attracted to different types of innovation. The ESRC are interested in innovation concerning theory, methods, data sources and international comparisons (Alsop, 2009). The ESRC strategic challenges identified for 2009-2014 are:

- Global Economic Performance, Policy and Management
- New Technology, Innovation and Skills
- Understanding Individual Behaviour
- Health and Well-being
- Social Diversity and Population Dynamics
- Environment, Energy and Resilience
- Security, Conflict and Justice (ESRC, 2009b).

Their strategic priorities for the same period are:

- impact through world class research
- impact through skilled people
- impact through world class infrastructure
- impact through international leadership

- impact through partnerships

Previously education has been a theme for ESRC, exemplified not least through its significant contribution to the Teaching and Learning Research Programme. Education as a specific challenge is notably missing from the list of ‘key challenges’ above, however arguably it has a role in each of them.

### c) Government departments

Government departments are a key funding body particularly for applied and evaluative research. Education departments, and other smaller organisations closely involved in the political process (such as the LGA) through lobbying activities, are significantly influenced by politicians and the political context as well as by the departments’ strategic priorities, specific country issues and the international context. Research priorities are outlined in strategic forward looking research/evidence plans published by the department.

Alongside the strategic department priorities there is a need for a certain amount of responsive funding in order to cater to changing external circumstances (such as the current economic downturn) and interests driven by ministers (highlighted by Chris Owen in the Welsh context at the Forum, see: Owen, 2009). It is important that these shorter terms investments do not impinge on longer term, more strategic priorities either financially or through competing policies. One area which has been increasingly important in terms of government priorities in an era of globalisation and the ‘skills race’ has been international benchmarking studies such as PISA.

### Charitable foundations other funding bodies

Charitable foundations and other funding organisations often work in similar ways to the commissioners described above in that they identify priority areas of interest in terms of the research they want to fund for the forthcoming period. The decisions regarding priorities are often taken by trustees or a committee. For Karen Whitby from CfBT Education Trust, who presented at the Forum, criteria such as user engagement, potential for real impact, and innovation are considered important.

### *“Excellence with impact”*

‘Excellence with impact’ is the RCUK strap line and was a phrase used at the Forum by Stuart Fancey from the Scottish Funding Council and Adrian Alsop from ESRC and it is increasingly applicable across all commissioners of research. Oancea’s audit of assessment criteria used across the UK found that criteria around quality, relevance and impact are considered important for a range of different assessment practices (Oancea, 2009).

The recent HEFCE consultation on the proposals for the Research Excellence Framework (REF) has stirred strong feelings from the academic community due to the inclusion of ‘impact’ as a key criterion in the assessment of research quality in HEIs. The proposals allocate 25 per cent weight to demonstration of ‘impact’ of research. Whilst previous consultations and research have dissuaded the use of quantitative metrics as measures of impact, there are still several key challenges and

concerns regarding this use of impact criteria. The proposals for the REF are clear in emphasising that quality comes before impact and that impact for its own sake is not useful (Gorard, 2008). A potential positive benefit of the REF proposals could be to better align quality and impact as there will be incentives to effectively disseminate high-quality research.

Impact is historically very hard to define let alone measure and often much of the impact is indirect and long-term – i.e. contributing to shifting thinking in a particular direction rather than having a direct and immediate impact on policy. Whilst particular types of research are likely to have more direct and transparent impact than others, it is important for stakeholders to be aware of the roles which the broad spectrum of social science research play in influencing debates (Bridges, 2009b). Perhaps researchers need to be more active and vocal about getting this across to users and other parts of the system.

It is clear that the media is an important medium for increasing impact through both influencing policymakers and practitioners. Researchers have little reprieve regarding what happens once research is in the public domain but should they take more responsibility regarding the use and dissemination of their work? There is a broad consensus that the majority of researchers are not particularly skilled in dealing with the media and do not exploit its full potential (see the capacity section of the report for SFRE I). Is there a need for stronger media and PR units in universities especially in the growth of and growing potential in online media (i.e. blogs)?

Excellence in research quality was discussed in details in Forum I (see Forum I Report: Pollard, 2008) and impact is a key focus on Forum III planned for March 2010 (see SFRE website for more information).

### **Outstanding issues**

- What is understood as ‘impact’ by different stakeholders? How can excellence and impact be streamlined?
- Is there a more strategic role for commissioners of research in the knowledge management system in terms of developing the knowledge base and connecting/building on existing knowledge (knowledge accumulation)? What is their role in terms of encouraging a range of different ‘types’ of research but also ensuring a balance between small timely responsive work and long-term programmes of investment exploring strategic issues?

## Conclusions and Forum review

In this section, some of the themes from the discussions over the two days of the Forum are highlighted. Tom Schuller of NIACE (and formerly OECD CERl) took the role of reviewer at the Forum and John Selby (HEFCE) concluded the proceedings. This section draws on their comments and observations (see <http://www.sfre.ac.uk/forum-2/>). The final part of this section illustrates some of the work underway in each of the four constituent countries enabled, in part, by the SFRE.

Tom Schuller stressed the importance of reflection and self evaluation and praised the role SFRE was playing in this process. However he also noted that the cultural and political context of a country has a significant impact on the knowledge management system.

One important contextual challenge is that of the media and its perceived power in shaping policy debates. Questions were raised at the Forum regarding whether researchers and politicians overestimate the power of the media. Relationships with the media perhaps need to be reconsidered and specifically researchers' responsibilities towards dealing with the media and dissemination of research. This will be covered in more detail in Forum III (see the SFRE website: [www.sfre.ac.uk](http://www.sfre.ac.uk)) so we will not consider it in detail here.

Competition is also a significant characteristic of the knowledge production process across the countries of the UK. It is important to find the necessary balance between competition and collaboration in order to sustain a healthy system. Currently financial incentives in the system for HEIs and individual researchers emphasise competition through the research assessment mechanisms such as the RAE and REF and through career structures. Is the focus on competition becoming destructive in terms of capacity building and producing high-quality research? Tom Schuller also raised the point that as academics surely there also are intellectual incentives which drive researchers. Could institutions do more to foster and motivate collaboration across institutions but also across disciplines?

Collaborative working is key to interdisciplinary working. Interdisciplinarity is not rewarded in the traditional structures of the academy. As with elsewhere, perhaps part of the problem is the range of work which is considered 'interdisciplinary'. Real interdisciplinarity takes time and investment and requires a strong commitment to and foundation in to the researcher's discipline rather than the converse. High-quality interdisciplinary work should push the boundaries of disciplines and contribute to their development rather than be considered a distraction.

There is a need for researchers to be confident about the contribution of their discipline both in relation to policymaking and practice as well as in order to do interdisciplinary work. In relation to influence on policymaking and practice it is important for researchers and commissioners to be aware of the nuanced ways in which research impacts both directly and indirectly. Whilst some disciplines and types of research are more likely to directly impact on policy decisions, others are making a more subtle, but no less important, contribution to the underlying debate or context in which education operates. In some areas researchers need to gain confidence and better articulate the contribution of their discipline and associated approaches and methodologies.

The focus of this Forum was around the different types of research and whether there was appropriate support for each area in order to enable high-quality work. Discussions at the Forum

highlighted that the contributions made by each type of research, and work undertaken before the Forum discovered that there was high-quality work taking place in all areas (for country overviews see Davies, 2009; Hamilton, 2009; Leitch with McCullough, 2009; Wilson and Morris, 2009). However it is important to consider the balance of different types of research, both across the four main types above but also the range of work taking place within each type. Whilst government departments are perhaps more likely to commission instrumental narrowly-focused work, capacity building around developing understanding regarding the benefits and weaknesses of different approaches could still be useful in broadening the range of research which counts as 'evidence'. In considering a knowledge management system, perhaps an important role for HEIs to play is to consider the balance of work undertaken in their institutions and whether this is conducive to achieving a balanced system across the UK.

### ***Progress across the UK***

#### **Wales<sup>11</sup>**

Education research capacity in Wales is in facing a challenging time (see the Wales Report for the first Forum: Daugherty and Davies, 2008). At this crucial time SFRE has played an important role in helping to develop an informed dialogue between key stakeholders. The Fora in Harrogate and Reading have created a valuable 'space' for policymakers, practitioners and the research community in Wales to share, explore and discuss their perspectives. A good example of improved dialogue is a successful dissemination event, held in November 2009, that attracted over 80 delegates including policy makers, practitioners and researchers. Delegates debated the findings and implications of the TLRP Wales review led by Professor John Furlong.

Collaboration between all who share responsibility for Welsh educational research has developed over the last couple of years. Perhaps this is because of the crisis in capacity but it is also recognition that working together, particularly in a small country, can be very effective.

A key development in building research capacity in Wales has been the establishment of the Welsh Education Research Network (WERN) supported by the WAG via the Higher Education Funding Council in Wales (HEFCW), and the ESRC. This network has been successful in building partnership between all HEIs in Wales to build capacity in education research.

Under the auspices of WERN and supported by the Welsh Assembly Government, the discussions that have been started at the Fora have been continued in inter-institutional meetings in Wales. For example, in March 2009, the new 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.

As WERN's funding ends, the HEIs, The Welsh Assembly Government and HEFCW have engaged in a productive dialogue about how to build on the research collaboration between institutions that has developed. It can be said that these discourses between academics and policymakers have become much more the 'norm' in Wales not least because of the influence of SFRE.

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<sup>11</sup> Thanks are due to Dr Sue Davies (Trinity University College) for her contribution to this section.

## Northern Ireland<sup>12</sup>

The Northern Ireland group at the Forum found the mapping exercise ahead of the Forum useful as it highlighted that whilst there was good work going on in each area, there was no central organisation and therefore it was difficult to provide a comprehensive overview. This was particularly relevant to practitioner research which perhaps needed to be more coordinated. There was a sense among the participants that it is difficult to speak with authority on the balance between different types of research and their relative impacts.

Having an overview of research projects is particularly important in terms of achieving maximum potential from limited resources, as are activities which synthesise existing evidence.

It was felt that Northern Ireland was relatively small and, while this created opportunities for collaboration, there was competition between research providers. It was suggested that we could aim for competition and collaboration, a model which exists with awarding bodies.

A number of action points were suggested and discussed:

- I. the mapping exercise could be reviewed to take account of issues that had arisen in discussion and to widen the input from other contributors,
- II. synthesis of existing research,
- III. a second local symposium event, perhaps a themed event bringing together different groups (interdisciplinary/ multidisciplinary) who have been working on the same educational theme.

While it was acknowledged that the NI Education Research Forum did provide a medium in which these issues can be discussed, the challenges of the next stage of working together to move things forward were also recognised.

Members of the group felt that the event had stimulated a number of ideas to be taken forward at a country level and, individually, they had also picked up ideas relevant to their own work.

## Scotland<sup>13</sup>

The Scottish Government (Education Analytical Services) held an event on 18 November bringing together the main public sector consumers of educational research (e.g. HMIE, LTS, SQA, SFC and local authorities) to establish how they currently engage with research and where their future research priorities lie.

Discussions at the event were very positive and focused around four key themes:

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<sup>12</sup> Thanks are due to Karen McCullough (Department of Education – Northern Ireland) for her contribution to this section.

<sup>13</sup> Thanks are due to Fiona Fraser (Scottish Government) for her contribution to this section.

- The evidence needs of each organisation over the next 5 years
- The capacity within Scotland/ outside Scotland to provide this evidence at a reasonable cost and to reasonable quality
- What scope there is to work with others within the public sector to meet evidence needs
- How the public sector can best engage with the suppliers of evidence

The Scottish Educational Research Association (SERA) is planning an event which builds on this, looking at the ways in which impact can be achieved through different forms of collaboration. The event will take place in Edinburgh on 26 February 2010 and will cover the following themes:

- Existing collaborations in Knowledge production/mediation and application
- Extending/developing collaborations
- Creating new collaborations
- Supporting production/mediation/application in the future

## England

A wide range of activities have occurred in England since SFRE II, and it appears that the interest in evidence-informed policy and practice continues to grow. A few examples are given below.

Contractors for three new DCSF Research Centres have been agreed, subject to final contract negotiations. These consortia will deliver both large analytical projects and more rapid briefings and reviews – thus reflecting a new level of researcher-policy maker collaboration. The new centres focus on:

- Youth Transitions
- Childhood Wellbeing
- Behaviour Change

The LSIS Excellence Gateway, provided for the further education sector, continues its rapid development, supported by CUREE. It is intended to ensure that the sector has access to evidence that will support improvement in teaching and learning. Priorities are to:

- translate relevant research findings into practical messages for the sector;
- support practitioners in the sector to do research and increase their capacity as researchers on the frontline;
- provide LSIS with an evidence base on what support the sector needs; and
- raise the profile and value of research in the sector.

A Coalition for Evidence-Based Education has been formed, led by Bob Slavin and others from York's Institute for Effective Education and under the patronage of Baroness Estelle Morris. A series of consultation meetings with potential users and stakeholders in England have been convened.

Among the core activities discussed have been:

- Raising awareness of the need for sound evidence in education policy and practice;
- Providing an authoritative source in the UK of evidence on teaching and learning;
- Working with aligned organisations and networks, such as SFRE.

## UK wide

ESRC sponsored an evaluative review of collaborative networks in building research capacity in education – one of its ‘priority areas’ for development. A November 2009 workshop took place in which three pilot networks (the Welsh Education Research Network, the Teacher Education Research Network, and the Social and Professional Network for Early Career Researchers) were considered. The networks built upon previous ESRC investments, such as TLRP, and the review was intended to inform ESRC’s long-term thinking about capacity building. Further information is available at <http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/opportunities/postgraduate/training/strategy/index.aspx>.

BERA continued to foreground ‘policy’, ‘quality’ and ‘capacity’ in its Strategic Plan and is gradually developing its services to members, provision and other activities to focus on these priorities. This is reflected, for instance, in new conference developments and plans for the support of special interest groups. In relation to building capacity for research, BERA has recently taken up several ex-TLRP initiatives, including the Meetings of Minds fellowship scheme and on-line training and support resources for research methods. With TLRP support, it is running a series of training events during 2010.

The HEA is continuing its work to highlight the value to HE practitioners of evidence on teaching and learning. This is reflected in Evidence Net (<http://www.heacademy.ac.uk/evidencenet>) which offers resources, events and networks so support evidence informed practice.

The CfBT’s strong commitment to evidence-informed policy and practice was reflected in a new publication during 2009 and achieved significant press coverage through its endorsement by Sir Jim Ros as the new Chairman of CfBT’s Education Committee.

SFRE I and II appear to have played a role in supporting practical follow-through of the commitment to evidence-informed policy and practice which exists across the UK. This commitment is manifested in many ways, relating to sectors, countries, roles, etc. SFRE recognises this complexity but brings colleagues together to wrestle with the dilemmas and challenges of practical implementation. Processes of development undoubtedly reflect struggles of principle and pragmatism, and outcomes will necessarily be variable. However, the idea that it is worthwhile to attempt to develop comprehensive knowledge management systems within the UK, and that this should, if possible, be achieved through collaboration with a wide range of stakeholders, seems to have been accepted. In their own and particular ways, each UK country is moving forward.

We look forward to SFRE III when the focus will be Knowledge accumulation, mediation and application.

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