Excellence in Research on Schools

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The Institute for Employment Studies

The Institute for Employment Studies

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Summary

In early 1998 the Department for Education and Employment (DfEE) commissioned the Institute for Employment Studies to conduct a review of educational research relating to schools in England. The main aim of the study was first to undertake an analysis of the direction, organisation, funding, quality and impact of educational research, primarily in the schools field; and then to produce recommendations for the development and pursuit of excellence in research relating to schools. The evidence gathering centred on four main strands:

- a literature review;

- interviews (mainly face-to-face) with 40 key 'stakeholders', a mixture of researchers and representatives of research funding bodies, DfEE, national education agencies, local education authorities, and individual schools;

- a 'call for evidence' from the research community, local education authorities and trade unions, which generated significant responses from: 46 researchers and research units; 13 local education authorities; and two trade unions;

- focus groups and interviews with 28 school teachers, advisors and inspectors.

Research agenda

Education research covers a wide range of subject matter and academic disciplines, methodologies and approaches, and therefore can be difficult to define. The definition that underpinned this study identified education research as that which 'critically informs education judgements and decisions in order to improve educational action' (Bassey, 1995).

We estimate that some £65 million a year is spent on educational research, mainly spread over 100 university education departments. The Research Assessment Exercise (RAE) of the Higher Education Funding Council (HEFCE), through which research funds are distributed to universities, is the dominant funding mechanism.

Research addresses a wide range of educational issues. There was a divergence of views over the balance of priorities within the current agenda. Most of the researchers contacted felt that the balance was too skewed towards policy and practice, while the practitioners and policy-makers generally thought the opposite.

Research process

There were a number of concerns expressed by our respondents about the nature of the research process. These included:

- the fragmented nature of the research community — which had led some to advocate the establishment of centres of excellence. Others wished to maintain a diverse supply base, partly to ensure initial teacher education and continuous professional development had a strong link to research;

- lack of co-ordination among research funders — and aspects of the research commissioning and funding process;

- the involvement of teachers in the research process — while there was general agreement that this could lead to more appropriately designed research, more useful and relevant outputs and therefore greater ownership and impact, there was less of a consensus over the issue of teachers as researchers. One side questioned their expertise and the general value of their outputs and the other stressed the importance of research activity as a means of accentuating teacher learning and reflective practice;

- the quality of the research process — there was widespread concern about the quality of much educational research, especially, but by no means exclusively, from those involved in policy formation, although we found no single objective definition of what actually constitutes 'good quality' research;

- the influence of the RAE — which some respondents felt did not sufficiently value engagement with policy-makers or practitioners in research content, design, process or dissemination.

Dissemination and impact

Dissemination was a further area of concern to most respondents. Issues included the:

- use of academic journals as the main research output (generally seen as a by-product of the RAE) and their inaccessibility to non-academic audiences;

- lack of encouragement given to dissemination to practitioner and policy-making audiences by many research funders;

- absence of time and intermediary support available to both policy-makers and practitioners to help them access research.

While we found some interesting forms of dissemination taking place, and some researchers placed great emphasis on involvement with teachers and other practitioners, such as occurs in the TTA school-based research consortia, the overwhelming impression we gained is one of 'rampant *ad hocery'*. There seemed to be little evidence of a comprehensive dissemination strategy by researchers, funders, policy-makers and those acting on behalf of practitioners, and certainly no evidence of a concerted approach.

On impact, the overall message we found from practitioners is that most education research does not impinge much on policy or practice, and if it does so, it is likely to be in an *ad hoc* and individual way. This is partly a result of the complex web of influences that affect the development of policy and practice. It may also be a product of research not being done on the right issues or in the right way. Additionally, it reflects a lack of interest and understanding of research among policy-makers and practitioners, the absence of a capacity to assimilate research findings, and an insufficiently evidence-based policy formation and development system in the field of education. There was a clear desire, in particular, among those charged with implementing policy, for research to be more prominent in the justification of policy initiatives, and for those initiatives to be thoroughly tested and evaluated both formatively and summatively.

Conclusions

Research is only one of the influences on policy formation and practice and any impact is likely to be indirect through a variety of transmission mechanisms and intermediaries. There is no simple model, and as a result the impact of research is difficult to isolate and measure. While there is influential work taking place and examples of good relationships between research and practice, given the volume of research, we would have expected a greater level of impact.

Our overall conclusion is that the actions and decisions of policy-makers and practitioners are insufficiently informed by research. Where the research does address policy-relevant and practical issues it tends to:

- be small scale and fails to generate findings that are reliable and generalisable;

- be insufficiently based on existing knowledge and therefore capable of advancing understanding;

- be presented in a form or medium which is largely inaccessible to a non-academic audience; and

- lack interpretation for a policy-making or practitioner audience.

This results at least in part from a research effort that is predominantly supply (*ie* researcher) driven. Furthermore, the research agenda tends to be backward rather than forward looking — following policy not prompting it. This is partly due to an emphasis on evaluation within much of the limited volume of government sponsored research, rather than exploration and development. It also reflects a dissonance between the policy-making and the research production cycles.

To support policy formation and practice, the research community has to have both a thriving theoretical and applied base which are fit for the purposes they seek to serve. Our assessment is that there is insufficient large-scale applied research in this area.

In the past, the impact has been diminished by a lack of commitment to basing policy formation, on research where it is available. Lack of impact may also reflect the absence of an effective mediation infrastructure, *ie* people and processes through which research is interpreted and assimilated into actions, decision-making and practice.

Recommendations

The strategy behind our proposals is aimed at:

- creating more strategic coherence and partnership;

- improving the capacity of research to provide support to policy-makers and education practitioners, through improving quality;

- enhancing the capacity of policy-makers and practitioners to receive such support, through improving their involvement in the research process and the development of mediation processes; and

- establishing a commitment to evidence-based policy development and approaches to the delivery of education.

Strategic coherence and partnership

- **A national education research framework** should be developed which identifies the key players and processes, the relationships between them, their roles in influencing educational research and its use in policy formation and practice.

- **A National Education Research Forum** needs to be established to develop an overall research strategy and framework, and to co-ordinate and monitor developments. We also believe that regional or local frameworks and strategies should be encouraged, perhaps through sub-fora. It may be appropriate for the DfEE to take a lead in helping establish such a Forum.

- **Policy fora** should also be set up within which researchers, policy-makers and practitioners would work closely to:

  - establish bodies of knowledge, based on systematic and regular reviews of research and knowledge;

  - ensure its effective dissemination, with a clear articulation of the implications for policy and practice at national and local level;

  - identify any issues which could be illuminated by further research, co-ordinate the research effort to tackle them, and to ensure their effective dissemination, as above.

- **Funder collaboration** — we further recommend that the research funders consult regularly with each other on their strategic approach to research; research agendas; application procedures; quality control processes; and dissemination strategies, perhaps under the umbrella of the National Forum. Consideration should be given to the collaborative funding of:

- systematic research reviews;

- projects aimed at disseminating existing knowledge to the wider education community;

- the establishment of longitudinal studies some of which may be large-scale; and

- the establishment of research centres of excellence with a diversity of models.

● We also believe funders should:

- encourage competitive tendering through efficient commissioning processes;

- develop generic quality standards, based around the 'fitness for purpose';

- encourage replication studies, where the knowledge base requires them and the research proposal is appropriate;

- encourage dissemination and interpretation for different audiences.

Improving quality

● **Quality assurance** — we recommend centres for education research should, taking account of generic criteria developed by funding bodies, develop and use clear quality assurance processes based around the principle of 'fitness for purpose'. The Code of Practice proposed by BERA could provide an important stimulus.

● **The Research Assessment Exercise** — we recommend that the quality criteria be reinforced to emphasise aspects of relevance to the wider world such as:

- advancement of knowledge, including across disciplines;

- methodological innovation or advancement;

- impact on practice (particularly in areas identified by the national or policy fora).

● We recommend that the criteria on dissemination in non-academic media and collaborative work with teachers and other practitioners be clarified, and/or reaffirmed, to ensure that they are encouraged and valued. We also recommend stronger user representation in review panels.

● **Research skills training** — we recommend that university education departments and other research institutions should ensure that all research-active staff are suitably qualified in social research techniques, and funders should take account of the research expertise of prospective research teams.

Mediation between research, policy and practice

● Mediation needs to be built in at the start of research and we would encourage researchers and research funders to identify

strategies for maximising the impact of the research at the outset. In addition, researchers should be encouraged to identify the audiences for their research and the appropriate intermediaries, and target them accordingly.

- **Clear dissemination strategies** should be built into all major research projects at the outset which relate the outputs of the research to all interested constituencies, and identifies appropriate mechanisms for reaching them in a way that is most likely to influence practice. Research departments and institutes should also develop clear dissemination strategies which promote all appropriate forms of interaction with relevant audiences. Researchers should be encouraged and rewarded for effective dissemination.

- **Information unit** — consideration should be given to the establishment of an education research information unit(s) to co-ordinate and support the collation of education research. This could develop and implement an overall dissemination strategy to ensure that different users have access to the information they need in a usable form.

- **Mediation infrastructure** — the National Forum should examine the mediation infrastructure between research, policy and practice, to identify ways in which it could be enhanced.

Commitment to evidence-based policy development

- Policy-makers, at national and local level, should commit to ensuring that wherever possible, policies are developed on the basis of, and/or related to, publicly available research evidence, and encompass clear and independent evaluation strategies. Such a policy-level commitment should feed through to practice, where more evidence-based decision-making should be encouraged.

Monitoring progress

- Our final recommendation is that it is time to move forward. A more effective research system requires change by all parties. Changes will need to be monitored and evaluated by the National Forum.

1. Introduction

In early 1998 the Department for Education and Employment (DfEE) commissioned the Institute for Employment Studies to conduct a review of educational research relating to schools. This report sets out our findings.

In this opening chapter, we discuss the background to the research, its aims and objectives, outline our approach, and set out the structure for the rest of the report.

1.1 Background

Educational research covers a wide area in its scope, process and (potential) influence. There are approaching 3,000 people engaged, wholly or partly, in educational research in some 100 institutions in England alone.[1] There are some 150 English local education authorities, 22,000 secondary and primary schools, and 420,000 teachers.[2] In addition, there are a broad range of official and unofficial agencies and intermediaries which also, to a greater or lesser extent, use or commission research to inform their practice.

In recent years there has been considerable debate about the nature and impact of the research effort. There have been a number of reviews throughout the 1990s (Gray, 1993; CERI, 1995; Ranson, 1995) which highlighted various areas of concern and proposed new courses of action. The debate was given added piquancy by Professor Hargreaves' lecture to the Teacher Training Agency in 1996 (Hargreaves, 1996). He now famously compared educational research and practice with medicine, and concluded that the former lacked an evidence base, and much of the research output was of poor quality and represented poor value for money.

Since then, the debate has stepped up with various exchanges about the validity of the comparison with medicine and the nature of Hargreaves' diagnosis and prescriptions (see, for example Hammersley, 1997). Further reviews have been commissioned, with the National Foundation for Educational Research (NFER)

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[1] Based on the numbers of 'research active' academics covered by the 1996 RAE review (Kerr, 1997; Murphy, 1998) plus those in non-RAE establishments.

[2] As at January 1997 — see *Statistics of Education, Schools in England*, 1997, DfEE.

recently reporting on an analysis of the 1996 Research Assessment Exercise (RAE) for education (Kerr *et al.,* 1997) and Professor James Tooley's report for OFSTED (on the state of educational research) in the process of publication at the time of writing (Tooley and Darby, 1998). The British Educational Research Association (BERA) hosted an Internet conference on the subject in March 1998. Two recent public lectures from eminent education researchers (Gray, 1998 and (the next day) Furlong, 1998) also centred on the impact of education research on knowledge, policy and practice. We are therefore conscious that we are coming relatively late to the party and adding to an already replete table of offerings.

In the meantime, the dancing has already begun. For instance:

- the new government has introduced a major reform programme embracing a range of issues;

- the Higher Education Funding Council for England (HEFCE) has transferred ten per cent of university education research funding to a new research programme launched in partner-ship with the Economic and Social Research Council (ESRC). It has an initial budget of £10.5 million and is aimed at deepening 'understanding of the factors which underpin and create effective teaching and learning at all levels, from pre-school to higher education and lifelong learning'[1];

- the funding arrangements for INSET and education Masters courses have been changed.

We are therefore commenting on a fairly rapidly changing scene and are vulnerable to changes or failing to appreciate the relevant significance of the changes that have already occurred.

1.1.1 The Institute for Employment Studies

We are also aware of being relative outsiders to the world of education research. Therefore, at the outset, a word of intro-duction may be appropriate.

As labour market researchers, working in an independent, multi-disciplinary research institute with over 30 professional staff, we have some familiarity with the territory, especially on the interface between employment and education (*eg* work-based learning, education business links and careers education and guidance). We also have considerable experience (almost 30 years as an institution and treble that within the research team) of conducting social research and seeking to help policy-makers and practitioners make better informed decisions. We are therefore able to assess the evidence we have collected from a perspective based on independence and some relevant knowledge.

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[1] See HEFCE/ESRC News Release '*New research programme will promote effective teaching and learning'* 15 May 1998.

1.2 Aims and objectives

The main aim of the study was to undertake an analysis of the direction, organisation, funding, quality and impact of educational research in England, primarily in the schools field, in order to produce recommendations for its future development. The research specification from the DfEE identified specific objectives for these recommendations. These were to:

- ensure the relevance and practical value of educational research to teachers, schools, LEAs, central Government, parents, governors and ultimately pupils;

- strengthen the dissemination of good quality research findings to appropriate users and audiences, and the utilisation of those findings;

- further the contribution of research to providing a core body of knowledge and related theory;

- strengthen the links between research, policy and practice;

- promote coherence across the range of research undertaken;

- enhance the fitness for purpose, robustness, reliability and validity of research undertaken; and

- ensure value for money/quality assurance.

This represents a fairly prescriptive list and focused our attention on the practical value of the research effort in helping to inform the actions and decisions of all those involved (directly and indirectly) in the provision of school-based education.

To place us in a position to meet these requirements we originally set the following specific objectives for the research:

- provide an overview of the nature and content of the national educational research programme;

- trace the flows between research, policy and practice, and the ways in which research influences policy and practice;

- assess the quality, value and utility of the output of the educational research programme from the perspectives of research funders, policy-makers, researchers and practitioners; and

- identify ways in which the content of the overall research programme, or elements of the research process, could be improved to the benefit of all the major interested parties.

It became clear at the outset that the descriptive elements of what we originally proposed (as expressed in our first two objectives) were less important than the analysis, diagnosis and prescriptive elements of the study (the last two objectives). Therefore, with guidance from the DfEE project managers and the project steering group, we have concentrated on these.

Finally, as ours is by no means the first review in this area, it is worth highlighting where additional value should emanate from this study.

First, we hope to have built on previous work and therefore see our study as cumulative, rather than starting afresh. Secondly, we have sought to gather data and assess the situation from all the main perspectives (*ie* funders, practitioners, and users of research [at all levels]). Most of the previous reviews approach the subject from one or two perspectives (often that of the researcher and/or based on the literature) rather than taking a more holistic approach.

As previous students of this area have concluded, there is never a definitive last word on educational research (Beveridge, 1998). Hopefully this report will, however, serve as a basis for moving the debate forward and provoke improvements to the way research is conducted and informs the development of policy and practice.

1.3 Our approach

Given the diverse interests involved, it was felt inappropriate to develop an approach based on data collection from representative samples of all the major constituencies (*eg* funders, researchers, policy-makers, policy implementers, practitioners *etc.*). Secondly, the qualitative nature of the information we were seeking, militated against a simplistic quantitative approach. We therefore adopted a more indicative route, collecting data in a variety of ways and providing interested parties with the opportunity to contribute.

While the nature of our approach and the structure of our sample(s) need to be taken into account when interpreting our findings, we have sought to apply our judgement in analysing our results and developing our conclusions. Our analysis is not based on (necessarily) a consensus or average view, but represents our assessment, having examined the data available.

There were four main strands to our approach to gathering evidence:

- a literature review — including the aforementioned research reviews and other relevant material. A bibliography of material cited is included in Appendix 1;

- interviews (mainly face-to-face) with 40 key 'stakeholders', a mixture of researchers and representatives of research funding bodies, DfEE, national education agencies, local education authorities, and individual schools;

- a 'call for evidence' from the research community, local education authorities and trade unions, which generated significant responses from: 46 researchers and research units; 13 local education authorities; and two trade unions;

- focus groups and series interviews with 28 school teachers, advisors and inspectors.

The details of the fieldwork are set out in Appendix 2. Participants in the interviews and call for evidence are identified in Appendix 3. The fieldwork was conducted by the IES research team and took place between February and May 1998.

In addition, we reported on some initial findings to the DfEE's Educational Research Working Group (on 19 May 1998), and our provisional conclusions and recommendations to a workshop comprising a mix of researchers, research funders and research users on 15 June 1998. We are extremely grateful for all the constructive comments made and have taken them into account in finalising our report.

It was agreed not to include the international dimension, looking at research practice in other countries, included in the original research specification, given the timescale and resources available.

1.4 Structure of the report

In any discussion of educational research, the issues raised tend to fall under one of three headings, those to do with:

- the type of research being done — *ie* the research agenda, its relevance and scope;
- the way it is being done — *ie* the research process, the quality of the research and the way it is conducted and funded;
- what happens as a result — *ie* the dissemination and impact of the research, and the capacity of the educational community to act on the results.

The rest of the report is centred around these three sets of issues. The next three chapters consider the evidence we have collected in each area. Specifically, Chapter 2 looks at the research agenda, Chapter 3 examines the research process, and Chapter 4 addresses dissemination and impact. In Chapter 5 we present our overall analysis and set out our recommendations.

The appendices include a bibliography, details of the method-ology, contributors to the interviews and call for evidence, the research materials, and a list of the abbreviations used.

The data collection generated a large amount of material which we have attempted to analyse systematically and objectively. All contributions (in terms of the interviews and calls for evidence) were made on the basis of confidentiality. Quotes cited (in italics) are verbatim but unattributed, unless taken from publicly available literature, where reference has been made.

Throughout the report we use the term 'researchers' primarily to refer to professional academic and research staff (*eg* in university education departments) although we recognise that there are other researchers in schools, LEAs, other arms of government and elsewhere. The term 'policy-makers', is used as a generic description for those in central government departments and

agencies. Local education authorities are usually identified separately. 'Funders' refers to those mainly concerned with funding and/or commissioning research, although there is an overlap with the previous category. 'Practitioners' covers teachers, inspectors, local authority advisors and their representatives. In some ways all are 'users' of research (although they may have different needs and interests).

2. The Research Agenda

In this chapter we discuss what constitutes educational research, and examine the scope and nature of the research being undertaken. We also discuss our respondents' views on the balance of the research priorities, and especially the idea of an Education Research Forum or some other form of structure to co-ordinate the research effort.

2.1 What is educational research?

Educational research is not easy to define. One helpful definition of educational research is that which*:*

> *'aims critically to inform educational judgements and decisions in order to improve educational action.'* (Bassey, 1995)

Michael Bassey uses this definition to encompass various realms of research: empirical, reflective and creative research; theoretical, evaluative and action research and: 'the search for generalisations and the study of singularities'.

Despite the inclusive list of methods, some might criticise Bassey's definition as too instrumental (with its emphasis on decision making and action) and prefer Foster's view:

> *'It seems to be sensible to regard educational research as that set of activities which involves the systematic collection and analysis of data with a view to producing valid knowledge about teaching, learning and the institutional frameworks in which they occur.'* (Foster, 1997)

The OECD definition (CERI, 1995) is similar (though longer). Others have produced wider or narrower definitions that in various ways emphasise particular forms of enquiry, subject matter or purpose.

We were not restrictive in the scope of our study, recognising the wide spectrum of educational research in terms of:

- level — *eg* theoretical, applied, or action research;

- purpose — *eg* research for developing knowledge, or for policy, practice, or personal development;

- method — *eg* research involving original data collection and analysis of secondary data; research based on qualitative and qualitative techniques.

Other dimensions could include subject matter and scale. However, we were primarily interested in research which was:

- systematic and analytical;
- conducted for a purpose related to the education system;
- added to the sum of knowledge.

However defined, educational research is not easy to isolate. While it is usually discussed as a discrete 'field of enquiry' (as opposed to a discipline in its own right), it overlaps strongly with a range of disciplines in the social sciences (including psychology, sociology, social anthropology *etc.*) and is not an homogeneous entity.

Below we map out the overall terrain of educational research in terms of the size of the research effort, as measured in financial terms, before looking at content and analyses of the subject matter.

2.2 Research funding

Arriving at an accurate figure for the sums spent of educational research is difficult, given the range of funders and number of researchers. Categorisations tend to be based either on source of funding or location of the work. Taking the latter, there are broadly four categories of funding, although the first (*ie* research within university education departments) can be sub-divided between:

- the annual 'QR' allocation to universities for education departments[1] — £27.6 million in 1995/96;
- the amount of research funding gained by these departments from non-HEFCE sources £21.8 million (Kerr *et al.*, 1997), the details of which are set out in Table 2.1.

This total of roughly £50 million excludes educational research done elsewhere within the university sector, *eg* by postgraduate students, or non-education departments; outside the higher education sector, by research institutes such as NFER, or others; and research done within local education authorities and schools (*eg* under Teacher Training Agency funding). There appear to be no publicly available figures for these other items. Informed estimates from interviews and the literature (see, for example, Hargreaves, 1996) suggest that:

- research activity by higher degree students may amount to around £5 million;
- research activity by non-education university departments (funded through their own RAE allocation and/or external

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[1] That given to universities for research and scholarship through the Research Assessment Exercise (RAE) which is conducted roughly every four years to determine the allocation of research funds to Higher Education Institutions.

Table 2.1: Total research funding made available to universities from external sources 1994/95

Source	£*'000	% of total
UK Central and local government and agencies	9,520	43.6
UK Charities	4,080	18.7
UK Employers	2,640	12.1
UK Research Councils	2,480	11.3
European Union	1,480	6.8
Professional Associations and Bodies	1,000	4.6
UK Universities and educational institutions	480,	2.2
Other (inc. overseas)	140,	0.7
Total	*21,820*	*100.0*

* Rounded to nearest 1,000

Source: NFER, 1997

sources) is likely to exceed £5 million[1] (a figure which could be counterbalanced by the extent to which non-education research is conducted by education departments);

● research activity conducted outside the university sector, including within LEAs (both primary research and analyses of performance data), examining bodies and schools, as well as research institutes such as NFER, which must also amount to at least a further £5 million a year.

Altogether, this suggests a total annual expenditure of at least £65 million in England, and a UK total at least ten per cent higher.

Furlong (1998) argues that the inclusion of 'QR' expenditure in such calculations is misleading:

'In reality of course, it is quite inappropriate to consider QR as "research funding" in the same way as research grants are; they cannot be simply added up this way. QR, as part of core funding, has two main purposes: (a) to support the personal research and scholarship necessary for advanced level teaching as well as publication, and (b) given that research grants rarely cover the full costs, to make universities' contributions to externally funded projects.'

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[1] An indication of the extent of non-education department interest in education research comes from an analysis of ESRC expenditure. Management data supplied to us shows that some £10 million worth of education-related projects (broadly defined), generally lasting between one and three years, were being funded by the ESRC. At least 20 per cent were being carried out within a non-education discipline (*eg* sociology, psychology *etc.*).

Although the first purpose may be seen as 'personal development' of university staff, the second still funds research through internal subsidy. It would also seem that most of the output (as assessed by the RAE) is unrelated to external funding (excluding sources such as the Research Councils) as it would not be peer reviewed and therefore not generally counted. Tooley and Darby (1998), in their review of recent educational research articles, noted the 'small proportion of the papers reviewed which reported research funded from outside (*ie* non-HEFCE) sources'. As the RAE output appears to be primarily funded through the 'QR' it would seem to be appropriate to include the expenditure in our overall estimate.

The main source of external funding, according to Table 2.1, is central and local government. This is slightly surprising, given the anecdotal evidence in the interviews that LEAs generally paid less attention to research in recent years and the low amount spent by the old Department for Education on research (which NFER felt had fallen so much in recent years: 'it is difficult to see further decreases' - Stoney *et al.* 1995). However, since the merger with the Employment Department, the importance attached to research at central government level has increased. In 1995/96, research on 'schools' accounted for roughly ten per cent of the £6.8 million DfEE spend on research. It has since doubled, to constitute around a third of the significantly smaller budget of £5 million in the current year.

Most of the central government research spend is focused on short-term policy-driven priorities and evaluation of existing initiatives. Local government research (either that spent with authorities themselves or commissioned from external sources) including through the Council of Local Education Authorities Research programme (CLEA administered by the Local Government Association [LGA]) also appears to have a current policy-driven focus, *eg* school improvement, special needs *etc.* However, this does mean that it cannot add to general understanding of the influences on, and the process of, learning.

Research Councils and Foundations have a wider remit, and seek to balance the interests of users with the interests of researchers to a greater or lesser degree, in both the content of the research and the use to which it is put.

Overall, the data indicate that while there is a range of research suppliers and funding sources, the scene is dominated in terms of supply by the university sector, and in terms of funding, by the RAE.

2.2.1 International comparisons

International comparisons of expenditure on education research (and development) are even more difficult to draw, given the different bases on which the figures are compiled in different countries. The OECD estimated that only 0.27 per cent of total education expenditure was allocated to educational research and

development in 1991/92 (CERI, 1995).[1] The UK was excluded from this calculation, which was based on six OECD countries. However, our own (extremely rough) estimate suggests that the proportion spent in the UK was lower.[2] Using an alternative measure, education accounts for 0.42 per cent of all research and development expenditure in the UK, half the average found by the OECD (based on data from nine countries).

In a separate study, NFER (Stoney *et al.*, 1995) found that about 0.5 per cent of the 1992 UK governmental research budget was given to education, around the average of the seven countries for which data were available.

2.3 Maps of the subject matter

As a precursor to its new programme of pedagogical research, HEFCE commissioned the NFER to 'establish a map of educational research within England', based mainly on an analysis of the 1996 RAE outcomes from university education departments (Kerr *et al.*, 1997). This therefore excludes much non-RAE funded and/or non-peer reviewed work (*eg* that for central government).

The 10,000 separate research publications analysed were classified into broad groups. The ten largest were:

- *educational policy* — with 47 per cent[3] of all publications containing key words associated with the actions of government (Acts, White Papers *etc.*) and government agencies (TTA, OFSTED, LEAs *etc.*);

- *subject-based enquiry* — 31 per cent of the output, covering core National Curriculum subjects (Science, Maths, English *etc.*), other National Curriculum subjects, and other, *eg* professional and vocational subjects;

- *teaching* — 28 per cent, mainly teaching methods;

- *education management* — 26 per cent, in particular whole institution issues and the management of the curriculum;

- *education* — 24 per cent were non-specific or general references but included the use of technology in education;

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[1] Note that expenditure on development is likely to be under-included, if not excluded, from the estimates of UK education research spend compiled above.

[2] Taking the £53 million figure used by the OECD for education R&D as a proportion of the *public* expenditure total on education of £29,550 million in 1991/92 produces a percentage of 0.18. This would be lower if private expenditure on education was included in the denominator.

[3] The categories overlapped and therefore the percentages add up to over 100.

- *learning* — 24 per cent of references looked at various approaches to learning (experiential, work-based, open or distance, student-centred *etc.*);

- *key skills* — 15 per cent, mainly literacy, rather than numeracy or communication skills;

- *assessment* — 12 per cent, largely involving coursework/ continuous assessment, course content and the use of attainment testing in relation to the National Curriculum;

- *institution effectiveness and improvement* — eight per cent, including the sub-theme of quality assurance. The authors noted that there was little research as yet on performance tables, value-added analysis, target setting or bench-marking; and

- *factors affecting education* — seven per cent, with a sizeable focus on cultural/multi-cultural research, and to a lesser degree on parental and home factors.

The authors concluded that:

> *'. . . there is already a considerable concentration of research effort in English universities on pedagogy in its broadest sense (as demonstrated by the volume of research on the processes of teaching, learning) particularly in relation to subjects within the curriculum.'*

In a similar exercise, Bassey and Constable (1997) examined the titles of 11,613 papers submitted for the 1996 RAE to construct a 'rough map' of educational research in UK universities. The dominant category was 'curriculum issues,' which the authors thought could be a product of their sorting procedures but also reflected the 'response that researchers have made to recent national educational policies'. The other points they noted were:

- the relatively large number of studies in the field of initial teacher education, compared with the low number of studies on nursery or secondary education;

- the low (around one per cent) of papers that tackled methodological issues.

2.4 Balance of priorities

The British Educational Research Association (BERA) in its submission to this study (Research Intelligence, 1998b) argued that there was a distinction between 'research which critically informs educational judgements and actions' and 'research which critically informs understandings of social, anthropological, economic or psychological phenomena or of historical or philosophical issues in research settings'. It concluded that:

> *'Both are vital in a democracy. . . . Recognition of this distinction would obviate some of the criticisms of research in education.'*

Other researcher respondents echoed the diversity of the research effort. For example (our emphases):

> *'There is a distinction between* practical *research (which one would expect to be funded by DfEE), and* academic *research (which one would expect the ESRC to fund).'*

> *'Educational research is a very broad church, ranging from* curiosity driven *research mainly of interest to the researcher, through research which is* policy relevant *(but still retaining an element of theoretical and methodological concern), to highly* applied *research conducted for a particular sponsor.'*

> *'. . . a distinction between* strategic *and* basic *research; that is, research designed to inform either policy or practice issues and research that contributes to the knowledge base . . . "blue skies" research where the notion of application of the findings is secondary to the contribution to, and accumulation of, knowledge.'*

Some researcher respondents thought that the output of research relevant to policy and practice was low, a large number thought it was too high, and a few (including BERA) thought the balance was 'about right'. Most also thought that the recent trend had been (rightly or wrongly) towards more 'policy and practice' research:

> *'The plain fact is that if you want to stay in research you have to propose the type of work that's likely to be funded, and these days, that's increasingly policy-related.'*

This is not a universal view. David Reynolds (1998) in his recent lecture to the TTA bemoaned the low status of applied educational research.

> *'In British educational research, the most useless research has the highest status and those of us who are in fields like school effectiveness are regarded with some disdain.'*

Sir Stewart Sutherland (1997) in a report for the Dearing Review concluded that:

> *'More needs to be done to increase the relevance of pedagogic research to the practice of teaching.'*

However, many researchers were anxious to make a case for not throwing out the 'blue skies' baby with the 'immediate needs' bath water. The general view was that the former was being dangerously squeezed, to the point at which it was below the 'critical mass' level necessary to a healthy education system. Several made the point that basic or 'blue skies' research could also (if not so immediately) inform policy and practice.

> *'The recent excellent achievements of our schools in terms of developments in formative assessment, gender awareness, science concepts, mathematical understanding, school development planning, and action research, have come initially from University teachers following their own ideas, unsponsored by outside agencies.'*

> *'There will still be a need for an academic community of research-based intellectuals, protected (though not divorced) from policy and practice, to raise the unimagined or forbidden questions.'*

> *'Whilst it is accepted that priority should be given to targeted strategy and practitioner-oriented research . . .[there remains a need for] the basic studies which will inform new theory at all levels and in all aspects of education.'*

The third area of agreement was that there was a need for better information. As one said:

> *'We cannot express an opinion on your question about the balance of the research effort, because we don't know what it is . . .'*

Policy-makers and practitioners also recognised the need for balance in the research agenda. Although many commented that the research agenda should shift more to a practitioner perspective and felt that there was much research that was too 'esoteric' to be of relevance to them, this was not the universal view. Several commented that research needed to be under-pinned by a theoretically pure research base which, while not of direct significance at that particular time, would perhaps underpin the practitioner of the future.

For example, one respondent argued that while much educational research would be designed to be applied in learning environ-ments, and therefore would tend to be both empirical and applied, this did not mean that theoretical research should be neglected.

> *'The examination of "whys" in education seems to us to be as important as the "hows".'*

Respondents from LEAs tended to emphasise the need for more applied than theoretical work. One argued that:

> *'Whilst recognising the important contribution of theoretical research, there is a need for a more rigorous and sustained approach to the applied research agenda — and a focusing of that on the day to day realities of teaching/learning and school leadership/management.'*

Most of the teacher respondents, particularly those not actively involved in research (*e.g.* through a second degree course, the TTA school-based research consortia or an LEA action-research project), felt disenfranchised by the research effort. For example, one told us:

> *'The relationship between educational research done by academics, and classroom teaching as done by people like us, has been of interest for some time. When we have discussed it in the department from time to time, we have wondered, as many teachers must do, what researchers are doing in their university education departments and why we rarely, if ever, hear about it. Perhaps it is our fault. Perhaps exciting ideas, supported by decisive research evidence, which would improve our teaching are easily available, but we have simply failed to notice them. Or perhaps the exciting ideas exist, but are hard for classroom teachers to find. Or perhaps there are no exciting ideas.'*

A number of our respondents from policy bodies recognised the volume of research taking place. Some felt that there was

insufficient research about the key issues to do with teaching and learning. Others recognised that these issues were being examined but through methodologies, or on a scale that was difficult to access and/or failed to generate results which could be generalised. Nearly all felt that there was a significant gap in interpreting research outcomes for a policy audience.

2.4.1 Research issues

We were interested to see whether there were any major research gaps in terms of issues. Our researchers generally felt that the fairly wide-ranging list of research issues identified by the ESRC review (Gray, 1993) was still largely relevant, although some researchers (and funders) argued that educational research was too focused on the statutory schooling age group and should encompass a broader lifelong learning agenda.

We also asked both policy-makers and practitioners about the issues they would like to see researched. At the centre of policy-making it was argued that:

> *'The issues are clearly defined and centre around standards and social exclusion.'*

In other words they reflect the main thrust of current government policy. Most of the other issues raised by policy-makers and practitioners could be fitted under these two headings. Many, particularly in local education authorities and schools, were interested to understand the research justification behind recent policy initiatives, not only to convince themselves (or others) of their virtue, but also to develop their approaches to implementation. However, the list was wider than the latest policy announcements and included:

- cognition and learning, including learners' perceptions of what makes learning effective and purposeful;
- the impact of information technology on learning, and the use of the National Grid for learning;
- teachers' learning and the factors affecting changes in teacher practice;
- curriculum issues and their application, including literacy; and numeracy;
- special needs;
- disaffection and under-achievement;
- impact of inspection;
- use of performance data;
- job satisfaction, morale and motivation among teachers, and their impact on pupil performance.

Finally, a common thread was a desire for policy development to be rooted in research and to be the subject of thorough and objective evaluation. It was also felt that OFSTED possessed a

fund of data which has started to be used as a research resource to support the development of better practice.

2.5 Strategic co-ordination

The diverse nature of the educational research effort and output has led some to call for more strategic co-ordination. One of the specific issues which has received much attention, particularly within the education research community, is the value of establishing some form of educational research forum. This is an idea particularly associated with David Hargreaves (1998) who sees it as the machinery for creating a national strategy for educational research:

> *'. . . it would be desirable to establish a National Educational Research Forum. It would not itself fund any research: its function would be to establish a continuing dialogue between all the stakeholders, and to help shape the agenda for educational research and its policy implications and applications.'*

There was a good deal of support, in principle, among our researcher respondents for the idea of a national body which would, on the basis of consideration by all relevant stakeholders, issue guidelines on the kind of issues which it had identified as meriting research, to give a clearer steer to researchers, and to co-ordinate the decisions of funders.

Their main concerns may be summarised as political and pragmatic. In the former case:

> *'It is important that some educational research remains curiosity-driven. If this element is removed by specifying all or most research in education, then many of the important characteristics of curiosity-driven research, including radical new ideas, innovative methodologies, connections to other fields of academic research . . . and all developments in theoretical understanding, would be lost.'*

> *'We would reject anything that smacks of corporatism.'*

> *'No one body should own the research agenda, but it would be useful to explore, compare and contrast the agendas which do exist',*

and

> *'A forum — or fora — would be really useful in identifying research needs, so long as not all researchers were expected to adhere to them.'*

The pragmatic concerns included problems inherent in:

- finding representatives from all sections of the education community and ensuring any forum was not dominated by particular interests;
- achieving consensus between bodies with different and sometimes competing interests, and their own agendas;

- determining a research agenda which had any degree of conciseness — the Scottish failure to do so (see Brown S and Harlen W, 1998) was often noted;

- 'picking winners'; there was some scepticism about what a foresight exercise might be able to achieve;

- actually influencing the consequent pattern of research, in the absence of undesirable top-down controls; and

- reflecting regional and local agenda needs, particularly where university education departments already work closely with practitioners and policy-makers.

The weight of these arguments against were sufficient for some to have doubts.

> '. . . a national strategy based on a single set of priorities is as yet unproven.' (McIntyre 1998)

3. The Research Process

This chapter concentrates on the organisational context within which research takes place. There are a number of issues which came up in both the literature review and the interviews, and on which we will concentrate. They include:

- the research infrastructure — and in particular the disparate nature of the research community;
- the co-ordination between and among funders and researchers;
- the involvement of teachers in the research process; and
- the quality of the research output, and in particular the role and influence of the RAE.

Below we look at each in turn.

3.1 The research infrastructure

In the last RAE there were returns from 104 universities and over 2,800 academics working in education in the UK (Murphy, 1998). However, only a relatively small proportion will be full-time researchers (with most combining research with initial teacher education and other academic duties). To this total should be added researchers in university departments not reviewed by the Education Panel, plus those in non-university research institutions. Indeed, there is a sizeable body of full-time researchers in independent institutions such as at NFER.

The research base was characterised as a 'cottage industry' by one of our interviewees. It was also a concern in the OECD review (CERI, 1995) and to others:

> *'Much educational research is being pursued by individuals or small groups, sometimes unaware of similar research being pursued elsewhere. The research lacks co-ordination, and because much research is relatively small-scale and pursued in a variety of different contexts, its conclusions are often contradictory.'* (Calderhead, 1996; cited in Rudduck, 1998)

In addition, the plethora of small-scale projects in small institutions can create difficulties for junior researchers on short-term contracts trying to develop areas of expertise on which to build a career (Brown, 1998).

3.1.1 Research centres

The atomised nature of the research community has led some commentators to advocate the creation of proportionately more 'centres of excellence', which would achieve sufficient critical mass to yield important intellectual and financial economies of scale, improving the technical capacity, inter-disciplinary collaboration and the opportunities to develop long-term research programmes (see, for example, Gray, 1993; Beveridge, 1998; and Hargreaves, 1996, 1998). They would also have the potential to make research more cumulative, share the lessons of earlier research more readily, and transfer skills. They could also significantly improve the career prospects of researchers appointed to them by providing some form of at least medium-term job security and investment in developing researchers' skills, expertise and careers.

Researcher respondents were fairly equally divided on the question of greater concentrations of research resources, and those in favour were divided as to the form which such centres of excellence should take. Opponents of greater concentration included some departments with a high RAE rating, as well as some with a low rating. Their grounds for opposition had less to do with the potential disbenefits to themselves than to possible disbenefits to university departments of education as a whole. For example it was suggested that:

> *'It's important to have as many university education departments as possible engaged in research. Career prospects are a big issue, but we need to tackle that some other way.'*

> *'To concentrate high-quality educational research in university education departments not engaged in large-scale initial teacher education or TTA-regulated continuous professional development would be directly counter to pressures for teaching to become a research-based profession. Any such division . . . would be a stupendous own goal.'*

These respondents echo the note of caution sounded by Brown and Harlen (1998):

> *'If the research resources were concentrated . . . a substantial number of highly competent researchers in the colleges or former colleges would be neglected and, in our view, teacher education would suffer by its disconnection from research.'*

One respondent, from a funding body, pointed to the practical difficulties of organising effective centres especially as, it was argued, they required high-level intellectual leadership, strong organisational management skills, and should be well-focused, methodologically or thematically. However, another respondent was concerned that if centres were subject-based, they could act against rather than promote plurality of research supply.

Those in favour of 'clusters' or 'centres' felt that ten or a dozen would be about the right number. The centres should be subject-focused, relating to the earlier discussion of national research priorities. The general expectation was that such centres would

mainly (though not necessarily exclusively) be located on university education departments with an existing track record in the ten to 12 key subject areas, *ie* they would become designated as centres of excellence. The problem facing the 'lone researcher' outside such centres was recognised but the overarching need was to establish the centres of excellence with consideration being given to alternative models including 'virtual centres' and networks, as well as those outside of the university system.

3.1.2 Broadening the supply base

As we noted earlier, the vast bulk of education research is conducted by university education departments, with NFER among the major non-university education researchers.

One of the issues highlighted by some of our respondents was a concern over an apparent lack of collaboration in the research process, especially the absence of cross-disciplinary or multi-disciplinary approaches. For example, one LEA respondent particularly wanted to see Departments of Psychology being encouraged to take more interest in educational research. Another respondent felt that there was a lot that could be learned from 'management and personnel research, and in relation to health and social services'.

Researchers felt that the RAE funding regime and the competitive pressures it produced, tended to militate against collaborative work. High levels of workload were another identified constraint.

3.2 The funding infrastructure

The funding community is also fragmented, especially compared with other European countries (Stoney *et al.*, 1995). There is a distinction between countries such as the UK and The Netherlands where education research and development is 'very much a shared activity between public and independent agencies and the university sector', and countries such as Denmark and (part of) Belgium where 'there is a much sharper separation between the funding and conducting functions'.

From our interviews there appeared to be very little liaison and co-ordination between the funding bodies. Even within government there seemed to be less contact between the various research arms than we would have expected. On two separate occasion we were pointed to examples where one funder was contemplating supporting/commissioning a project without realising that a very similar piece of work was being launched elsewhere. If research funds are scarce (and most funders felt they were) this seems, at best, inefficient.

It also suggests that the register of educational research was not being used. However, there were clear signs that this problem had been recognised and greater liaison between the various bodies was beginning to take place.

We found relatively little evidence of joint funding. Although this can cause problems when research projects have multiple objectives, and different parties have different expectations from the results, a few interviewees (from all quarters) thought that there was greater potential for collaboration, especially to fund the large-scale projects that could be necessary to produce the sort of reliable data that national policy-makers require.

Many of the research respondents felt that the criticisms levelled at researchers were the product of the poor understanding of research processes and protocols in some of the organisations commissioning and using research. Again, there are signs of improvement. For example, respondents contrasted the lack of senior-level research expertise and understanding in the former Department for Education, with the situation since the merger with the more (apparently) research-aware Employment Department. Others commented on the growing research awareness in some of the education agencies (QCA and OFSTED were mentioned) and among a few LEAs. The TTA had come in for particular criticism about their approach to research, mainly from researchers and research funders. For instance, one researcher argued that:

> *'The TTA may be encouraging research relevant to classroom practice, but it is certainly not exercising quality control relating to research design, generalisability or the interpretation of findings.'*

This comment, made in relation to the first year of the teacher research grant schemes has since been partly addressed and the TTA has sought to address other criticisms through a range of initiatives designed to develop teaching as a research-based profession.

Finally, some researchers pointed to the problems of working for government paymasters such as:

- short timescales for the research, governed by budgetary factors and the needs of policy-makers;

- publication and independence — there was a widespread feeling that among researchers the fruits of the efforts should reach the public domain, even where the results were 'difficult' for the government. Although government agencies do have a commitment to publish ('in 98 per cent of cases') we were given examples of where, in the past, researchers felt that their research had been suppressed when it highlighted deficiencies in government policy.

3.3 Involving teachers in the research process

Another theme running through much of the literature and our discussions was that of the involvement of teachers in research. Since 1996 the TTA has provided small bursaries to teachers to conduct research projects, in collaboration with researchers from higher education. The aim is to promote greater teacher engagement with research, and to stimulate growth in evidence based

practice, with teachers using the outcomes of research to review and refine their approach to teaching. A consequence of the move has been to stimulate debate about the nature and volume of pedagogic research of relevance to teaching.

We found some very interesting examples where research, supported by the TTA scheme or other means was felt, by the teachers involved, to have prompted changes in practice to more effective ways of working. It was also felt to have contributed to the development of a more 'evidence based culture' in the school. Such research can obviously be very useful at a local level as a means of encouraging personal learning and development, and bringing about organisational change. However, the limitations of such research as a basis for generalised conclusions and therefore wider impact at policy-level were recognised by practitioners and researchers alike.

Generally, practitioners felt that teachers could play a greater role in both research design and particularly the interpretation of results. Some wanted to conduct research as well — not just action research projects, but also more wide-scale projects. However, most recognised their lack of research expertise:

> 'Practitioner research cannot and should not be seen as the sole vehicle of educational research.'

Some policy-makers and funders welcomed greater teacher involvement in the process, and particularly at the front (design) and back (dissemination and interpretation) end. However, some were concerned about (a perceived lack of) teachers' research skills:

> 'How do teachers know what is good research?'

The TTA school-based research consortia initiative addresses a number of these issues. The four consortia that have started in the last twelve months involve HE, schools and LEAs working collaboratively on research with a specific focus in response to local or regional needs. Built into this initiative is the establishment of data sets and opportunities for teachers to develop research skills.

Our researcher respondents mainly took the view that the potential for beneficial teacher involvement depended on the type of research.

At one end of the spectrum, the extreme 'blue sky', speculative research, researchers are likely to have the major role in suggesting what should be researched, how the research should be conducted, evaluated (by other researchers), and subsequently disseminated (mainly to other researchers). There were two, broadly numerically balanced, schools of thought here. One argued that practitioners have no part to play in any of this — even if they had the time — since they are preoccupied with immediate local issues and will usually lack the professional understanding to contribute to big issues not immediately related to practice. Others believe there are some practitioners who do

have these capabilities, and support the case for their involvement at all levels.

At the other end of the spectrum, the case for teacher involvement is more clear cut. As one respondent wrote:

> *'A strong feature of near-practice research in education is its sensitivity to context and its understanding of the need to work with practitioners in the field, if research is to have an impact.'*

More extensive involvement with teachers and practitioners was noted by a number of respondents. To quote Murphy (1998):

> *'A very large majority of educational researchers have a close involvement with practitioners . . . and benefit from high levels of stakeholder involvement.'*

In some parts of the country there are LEA or TTA based research consortia in which a university department of education appears to act as an expert support to users who determine their agenda according to local needs, and teachers collaborate with researchers in specifying and conducting appropriate research.

In the middle of the spectrum stood one researcher, who said:

> *'We don't want teachers to become researchers; that won't improve things. But we (researchers) do need to think much harder about how to involve teachers in research.'*

The comment touches on the two key issues:

- greater involvement of teachers in the research process — there was general agreement that this could lead to more appropriately designed research, more useful and relevant outputs, and therefore greater ownership and ultimately impact; and

- teachers as researchers — here there was less consensus, with one side questioning their expertise and the value of their inputs and outputs, and the other stressing the importance of research activity as a means of accentuating teacher learning and reflective practice.

The latter debate revolves around definitions of research and the purpose for which it is conducted. In particular, whether that which is undertaken for personal or organisational development is similar in nature to that which focuses on policy formation or general understanding of a subject or issue.

3.4 Quality

At the heart of the debate is the issue of quality. However, we found no single objective definition of what actually constitutes 'good quality' research. Different people and organisations will adopt different measures; some incorporate concepts of relevance and/or utility, others (*eg* the RAE) do not.

In the judgement of some (Gorard, 1998; Smithers, 1997) the quality of much educational research is found wanting. But as Richard Dawkins, Oxford Professor for the Public Understanding of Science, notes:[1]

> 'It's extremely easy to dredge up seemingly absurd research and hold it up to ridicule.'

In their recent review, Tooley and Darby (1998) found that only one-third of research (taken from a random selection of papers published in the recent volumes of major education research journals) met 'many or all' of his quality criteria including rigour with respect to triangulation, sampling, use of primary sources, and the avoidance of partisanship, when assessing the focus, conduct and presentation of the research.

Another source of evidence points to a further conclusion. As Furlong (1998) notes:

> 'Education has been progressively more successful in successive RAEs.'

— although this point may not assuage critics of the RAE quality assurance system and its reliance on peer review.

However, we did find widespread criticism of the quality of much educational research among our interviewees, from policy-makers and funding bodies. Although the best was felt to be as good as any social research, a lot was 'below standard':

> 'There is a long tail of educational research with much of low quality.'

This may reflect the quality of research proposals rather than projects.

> 'We get endless research outlines which are, quite frankly, rubbish. Some are very good, but generally the volume has gone up while the average quality has fallen.'

Practitioners were also concerned that research should be done properly, but some were not convinced that an over-concentration on methodological correctness (either statistical or contextual) was 'a productive way forward'.

> 'There remains a research gap between the "common sense" approach and that still advocated by statisticians.'

Here lies one of the inevitable tensions between practitioners and researchers. The former tend to focus on clarity in research findings, while the latter tend to concentrate more on methodological detail.

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[1] See M Honigsbaum: 'PhD? Got just the job to suit you sir', *The Guardian*, 25 April 1998.

There were a number of aspects to the quality of educational research which came up in our discussions. Below we look at concerns to do with:

- duplication and replication;
- quality assurance;
- peer review;
- methodological rigour;
- research skills.

3.4.1 Non-cumulative work: duplication and replication

Most of the researchers with whom we have had contact felt that while there was some duplication, there was a lack of replication and accumulation of knowledge. For example:

'Much research work is wasted, due to a general failure to replicate and to work cumulatively.'

'All too frequently, researchers find themselves re-discovering the wheel, especially in relation to other disciplines.'

'Yes, there is repetition. Researchers should use earlier work and look for (and test) alternative explanations.'

However, several pointed out that 'this is not uniquely a problem for education', and that 'the same is true in other fields'.

There appear to be practical difficulties which researchers in the social sciences face in building on past work. One is the sheer size and complexity of the terrain:

'. . . no longer possible to review the whole field of research.'

'. . . so many separate journals and professional associations for different sub-sections within educational research that it's easy to miss out on opportunities for cross-fertilisation.'

And, as the NFER (May-Bowles, 1998) has pointed out, even they find it difficult because:

'. . . despite the [available] resources . . . the sources of data remain fragmented and it is necessary to look in several places to ensure that nothing has been overlooked. Even after this, one cannot be sure that coverage is comprehensive.'

Other perceived difficulties were more to do with the pattern of funding (our emphases):

*'On the one hand is **pressure from funders** to produce results quickly, and on the other our lack of time and resource.'*

*'Replication is important, but the **RAE doesn't recognise it**. Researchers tend to be fearful of criticism of duplication, so carry out unique enquiries . . . [leading to] fragmentation and the appearance of triviality.'*

> *'Duplication is partly a consequence of the greater **pressure to publish** within the limited timescale imposed by the RAE.'*

> *'Nothing wrong with replication. But the **ESRC** insists on asking "is this new work?".'*

Although one respondent was:

> *'. . . not convinced there's a serious problem, given the dearth of funding for any kind of educational research.'*

the balance of view was clearly the other way, as captured by McIntyre (1998):

> *'This task of critically reviewing and synthesising research so that it can authoritatively inform policy and practice is one which the research community itself should be encouraging its members to treat as of equal importance and prestige to doing and publishing research.'*

Overall there was a clear issue of how to increase the cumulative nature and foundations of research, an important issue to be addressed by both researchers and funders.

3.4.2 Quality assurance

Another approach to the 'quality' question is not to look at the research outputs, but at the effectiveness of the quality assurance mechanisms and structures which are applied to educational research.

In our 'call for evidence' from academic researchers we specifically sought their views on such questions as:

- Are there adequate quality assurance procedures and guide-lines to which researchers should work?

- Do funders and research organisations need to improve their process standards?

- What are the strengths/weaknesses of peer review arrangements as a determinant of what is/is not 'quality' research?

- How might they be improved or supplemented

We tried to distinguish between the quality assurance procedures of purchasers (funders) and those of providers (researchers). The former, of course, are generally not specific to educational research, since many disciplines depend for the majority of their funding on the same relatively small number of funders.

One respondent spoke for almost all in accepting that:

> *'Funding bodies should have proper quality assurance arrangements (as well as in-house research expertise).'*

It was in the interest of researchers, not least because (as others said):

> *'We need funding agencies to make it very clear exactly what are their technical requirements for research proposals.'*

> *'Although quality guidelines which relate to processes, procedures and outcomes are more problematic in a multi-disciplinary area . . . [like this, they] . . . have been important in making HEIs pay attention to research training . . . '*

There were a few dissenting voices, mostly to do with the 'hassle' involved:

> *'There is already too much review. HE is being saturated with it. Rationalisation is needed.'*

> *'Funders quality assurance systems [exhibit] excessive central controls.'*

As far as university education departments' own quality assurance arrangements were concerned, a number of respondents were keen to argue the robustness of their systems and the (unquantifiable) benefits to research quality. Practices included:

- research and development groups set up to help inexperienced researchers;
- published guidelines for doctoral students; and
- feedback from those students.

3.4.3 Peer review

Peer review is a key element of the educational research quality assurance process. It applies to research proposals and to submissions for publication. The system is designed to assess 'quality', purely in terms of academic rigour and methodological robustness. It applies directly to around two-thirds of all educational research, *ie* that part funded by the foundations and RAE. The system is not without criticism. Hargreaves (1998) argues that:

> *'There is excessive reliance on peer review in determining the funding of research.'*

He maintains that the views of users of research are not sufficiently taken into account in the process:

> *'Peer review systems which are seriously adrift from the relevant user communities are in danger of being self-nurturing, self-communicating, self-validating and self-perpetuating.'*

Our respondents were supportive of peer review in principle, while recognising it had some blemishes. Everybody had a 'but':

> *'. . . not much wrong with peer review per se.'*

> *'There's an increasing movement against it, but it's difficult to see what could replace it.'*

'It's something of a lottery, but we should fight to retain it and make it better.'

'Peer review isn't perfect, but (as the 1990 Boden Report said) it's still the best method of assessing quality that we have.'

'Anything other than that would pose a severe threat to academic freedom.'

As the above quotes hint, however, there was less enthusiasm for the effectiveness of peer review in practice, although some respondents echoed one who took pains to note that:

'. . . review procedures (in educational research) are just as rigorous as in other disciplines, and in the international system.'

Most of the criticisms related to perceived faults in the way the current system works, but a significant minority wanted to see changes in the system. Taking the first group first, those faults included:

● too much anonymity of reviewers/need for greater transparency and dialogue (in the interests of quality) between reviewer and reviewed — reviewers to reveal their names;

● insufficient effort and care by some reviewers ('peer review is only as good as the peers') into assessment of others' work;

● reviewer and reviewed not always closely matched, even in the ESRC, in terms of background and experience;

● new and/or radical researchers are likely to be excluded as the process is seen to be very 'conservative' in both the criteria and the choice of reviewers.

'It's become establishment review by those who dominate the editorial boards of major journals; a self-perpetuating culture.'

A second group of respondents was less concerned to polish up the existing system than to reform it, largely on the grounds that what constituted 'quality' research ought not to be defined in terms of such narrow academic criteria. The views of users of research should be put into the system. For this group (to quote one):

'Peers should not just consider the quality (of what they are reviewing), but also its relevance.'

And for another, the peer review elite should not have:

'. . . an agenda and set of interests of its own . . .'

Nor should it, according to a third, continue to:

'. . . fail to recognise that the real "customers" of educational research are not exclusively other researchers, but teachers and policy-makers.'

Many felt that these points could, in part, be addressed through greater user involvement in peer review.

3.4.4 Methodological rigour and research skills

Nevertheless, these systems do not seem sufficient to alleviate the concerns of a number of respondents over the methodological rigour of much educational research. For example, Tooley and Darby (1998) point to the absence of sample details and to the small sample sizes of many of the studies they reviewed. One of our funder respondents espoused concern about the skills of many researchers, specifically with regard to questionnaire design and response rates, as well as sampling.

Methodological competence was also questioned by some of the research funders, citing the number of flawed proposals that they saw as evidence.

> *'I have a number of concerns regarding the issue of quality. There is a plethora of small scale studies which do not provide a strong enough basis to inform the development of practice. There is also a dearth of longitudinal studies.'*

However, we could find little evidence of collaboration among funders over methodological standards or generic definitions of what constituted good quality.

To some this was a problem of training. For instance, one of the concerns was the suitability of the research method to the aims of the project. National and local policy-makers in particular wanted generalisable results based, largely, on empirical evidence.

Another (researcher) respondent argued:

> *'Having been on the editorial board of a prestigious educational research journal, it is quite clear that the quality of research papers submitted is often low. Although the peer review process can assist with improving the quality of research papers, there is a fundamental problem with the training that educational researchers receive. Some may have had primarily quantitative experience and some primarily qualitative. But few seem to have had experience/training in both. Higher degrees in particular should ensure a sound grounding in research methods.'*

While it obviously comprises some very experienced researchers, the nature of initial teacher education means that many members of university education departments may be relatively new to research, coming from a background in front-line teaching or support activities (McIntyre, 1997). As the RAE encourages all staff members to submit their research for review, it was suggested to us that this could lead many relatively inexperienced researchers to become involved in research.

> *'Many people are only partially trained and do not have the technical sophistication to conduct significant enquiries.'*

This begs questions about research training and development, which were picked up by the ESRC review (Gray, 1993) and also echoed in more recent commentaries, *viz*:

> *'Present levels of funding cannot be justified while large numbers of university department of education staff are so clearly lacking in research training, experience and expertise.'* (McIntyre, 1998)

It also begs questions about optimum divisions of labour.

3.5 The influence of the Research Assessment Exercise

An underlying theme running through many of the issues on which we concentrated was the influence of the RAE. Despite accounting for less than half the annual educational research spend (see Chapter 2) it appears to be the dominant influence over much of the research process. As Gipps (1997) says, the RAE is:

> *'. . . the major force which is driving research activity for most members of staff of education departments.'*

To some, the RAE can be not only 'a linchpin of research quality and academic freedom', but the determinant of whether university education departments have the opportunity to engage in research in any serious way.

Perhaps unsurprisingly, therefore, respondents from university education departments which had done relatively well in the 1996 RAE tended to be less critical (but not uncritical) of it than those which had not.

Some were uncomfortable with the RAE Panel's own quality assurance system:

> *'. . . based on assumptions that peer review of publications provides a good quality assurance mechanism.'*

The 'publications' yardstick could create tensions, distortions and poor quality outputs:

> *'(The RAE) . . . has led to a proliferation of outlets for publication, as though publication itself rather than the impact of ideas on structures of thinking and practice is what matters. . . . '* (Rudduck, 1998)

> *'(The RAE) . . . has had both positive and negative effects. It has raised the profile of research and increased its volume; but some research is being done too quickly and published too soon.'*

> *'The process is much too focused on postgraduate degree programmes and dissemination via learned journals.'*

> *'It . . . creates a demand for research from many who do it badly, and do not necessarily wish to do it, by demanding returns of individuals, rather than departments.'*

This latter criticism was echoed by several respondents.

The RAE guidelines suggest that account is taken of policy or practitioner oriented dissemination (see Section 5.3 below). However, academics in university education departments strongly

involved in applied research and its publication consider that one effect of the RAE Panel's interpretation of its publications yardstick is to exclude them from significant funding, irrespective of the quality of their work. So:

> *'What masquerades as excellence is actually a deeply contradictory form of elite rationing.'*

> *'. . . an academic elitism which debases practical research.'*

> *'. . . a few institutes effectively become the centres of excellence which are under debate, and new university education departments are effectively denied access to half of the available research funding.'*

Several respondents argued a need to revise and make more explicit the criteria of 'quality' (an issue raised in HEFC's own recent review of RAE):

> *'Quality can mean different things to different peers. . . .'*

> *'Otherwise, the system promulgates research for research's sake.'*

> *'. . . the criteria do not exist for assessing the contribution of educational research to the quality of life, or their use value.'*

The practical implications of a dozen assessors reviewing 11,000 publications leave little room for a thorough quality assessment. IES was informed that the process allows for nothing more intensive than a trawl of research titles, researcher names and journal titles in which they were published, with little or no actual reading to assess quality.

Other detailed criticisms of the process include problems of:

- scope:

> *'RAE restricts cross-disciplinary research by encouraging returns located within a single field.'*

- focus:

> *'Too concerned with schools-related research.'* (to the exclusion of Adult/Continuing education)

> *'Domination by schools-focused researchers on the Panel.'*

- representativeness of the review panel:

> *'Far too many panel members from "old" university education departments.'*

> *'The last Panel contained not one assessor who was qualified to make judgements in [our sub-discipline].'*

> *'An absence of a user representative.'*

Overall there was a strong view that there needed to be a greater emphasis on users and application in the assessment exercise.

4. Dissemination and Impact

In this final chapter we examine what happens to research once it has been conducted, *ie* the issues surrounding dissemination of research finding and their impact.

4.1 Dissemination

There was considerable consensus among our practitioner respondents (who by their selection were likely to be receptive to research) on the issue of dissemination — that there was not enough of it and it was not well done. Researchers, on the other hand, seem to be putting a great deal more effort into appropriate forms of dissemination than we had expected to find, and often on the basis of what was once described as 'self-exploitation' (Ranson, 1995). This may just reflect the nature of our researcher sample, but many of our interviewees could cite very recent examples of either collaborative working, presentations or writing material for various audiences. However, the dissemination channels were mainly driven and created by the researchers (the 'supply' side) with less involvement from practitioners and policy makers (the 'demand' side) and most researchers agreed that dissemination was a problem (and not a new one).

> *'The channels for disseminating research findings to practitioners are grossly inadequate.'*

4.1.1 Forms of dissemination

The proliferation of one form of dissemination, academic journals, has already been noted (see 3.5 above). However, such material tends to lack an element of 'user-friendliness' in either its scope or presentation as far as practitioners are concerned. For example, one respondent felt that:

> *'A lot of it is stodgy, pedantic nonsense and some of it is really good. Much is very esoteric, looks at a very specific area that is of marginal interest, statistically laden and can't draw conclusions that impact on practice.'*

A further issue here is the volume of material currently available and the problems this presents the academic reader (or indeed any potential user) seeking to identify relevant material for their studies (May-Bowles, 1998).

Academic papers were just one of the forms of dissemination from researchers to the wider education community. Many are involved in more interactive means, such as conference presentations, seminars and workshops, in addition to collaboration on research projects. Many of our interviewees were literally just back from, or about to move on to, some such presentation, usually involving teachers. One claimed to have presented research findings to audiences totalling over 5,000 in the past five years (and said that a colleague could claim 7,000). In part this typifies:

> 'The involvement of . . . a very large majority of educational researchers with practitioners and policy-makers is very close.' (Murphy, 1998)

A closeness confirmed by several researchers responding to our call for written evidence, *viz*.:

> 'Increasingly . . . research is undertaken with partner organisations and practitioner collaborators, making dissemination a reality.'

> 'Most of us are doing our best to disseminate directly.'

> 'Channels for dissemination are general adequate . . . [but] . . . the declining role of local government is making it more difficult to engage with some users.'

It is impossible to estimate the volume of such activity or to observe a trend empirically. However, the anecdotal evidence we collected from both practitioners and researchers was that the incidence of such interaction was patchy and, that it was limited due to the pressure of resources at school and LEA level choking off demand and funding pressures within universities constraining supply.

Other forms of dissemination were more indirect, involving an intermediary between the researcher and the 'end-user', for example, the NFER Topic series and digests from the National Association of Education Inspectors, Advisers and Consultants (NAIEC). Some LEAs were mentioned favourably in this regard. However, not all LEAs have the capacity to provide this service and their stance to an extent seemed to be influenced by whether the authority was an active research commissioner, practitioner and/or user.

The issue, however, is not just the existence of research summaries, which if too simplistic can serve to lower rather than raise understanding. It also depends on the interpretation of research findings for the audience and the placement within the context of other relevant research.

The overwhelming impression we gained is one of 'rampant *ad hocery*'. There seemed to be little evidence of a comprehensive dissemination strategy by researchers, funders, policy-makers and those acting on behalf of practitioners, and certainly no evidence of a concerted approach.

4.1.2 Barriers to dissemination

Various reasons for the current situation were given.

Researcher respondents saw some progress as being dependent upon changes to be introduced by funders in general, and changes in RAE funding criteria in particular. Current constraints included:

● funders did not necessarily require researchers to submit a dissemination strategy, and where they did, they were often reluctant to fund it properly;

● in some cases, dissemination was not allowed by funders;

● funding levels often allowed researchers no time to do more than the basic write-up of a project;

● the all important RAE funding system which, despite the written criteria (see Section 5.3), was felt to value publication in academic journals at the expense of other media;

> *'Why is there no credit for materials and journals written to improve and support learning in schools?'*

> *'Some journals are not rated by RAE Panels; they are mainly to do with practice . . . .'*

> *'The journal I edit has a readership of thousands of practitioners, and counts for nothing with RAE. They prefer journals with a readership of hundreds of academics.'*

As one respondent put it:

> *'. . . it needs to pay more attention to the value of the message, and less to the status of the medium.'*

Some of the interviewees from funding bodies felt that many researchers were too busy with their other academic duties to be heavily involved in practitioner dissemination (see Section 3.1), which was not a valued activity. Some also felt that they did not have the necessary skills. One argued that 'it is not their competence' and another said that:

> *'the best researchers can be appalling communicators.'*

Among the practitioner community there were a range of barriers identified, including the impenetrability of much of the language used. For example:

> *'I read education research via the programme and try to keep up to date, but many articles are too dry and not relevant. Research needs to be written in appropriate language and we need help in accessing it.'*

In this way they echoed the views of the TTA (1997):

> *'Traditional research vehicles for reporting findings are not geared specifically to the needs of practitioners . . . the findings of research tend to be disseminated to other researchers rather*

> *than to classroom teachers . . . when new findings are disseminated, they are not disseminated in a way that encourages teachers to consider the implications for their own practice.'*

Gray (1998) argues that researchers have been taking up the challenge of putting research-based ideas into practitioners' hands:

> *'Several new journals have been recently launched . . . with the specific intention of breaking down barriers whilst other researchers are experimenting with more innovative forms of presentation.'*

Teachers have relatively little time available to them to consult research findings. This problem is exacerbated for teachers at infants and junior school level because of the high level of contact time. Generally, most school-based practitioners do not have ready access to libraries or significant numbers of research journals. One mentioned that they were encouraged to use the Internet by their local university but have not done so because they were not confident that they could access it.

> *'Need better access, more dissemination, abstracts, support for teachers to do research and read about it.'*

Many practitioners thought that the onus did not just lie on them to access research (or for the researchers to directly access users), but that intermediaries also had responsibilities to target research findings to appropriate audiences and help them interpret the results.

One of the LEAs we spoke to felt quite forcefully that it is the LEAs' responsibility to get the outputs of research into schools. They paraphrased Seamus Hegarty and said:

> *'It is not the responsibility of the pharmacological research scientist to get the product on the shelves, nor for researchers to disseminate to schools.'*

Another argued it was the role of national government:

> *'The DfEE has high ability and capacity to produce more analysis of information coming from HEIs; this responsibility should sit with them. It can be done well centrally providing the resources are there to do it. Sadly HMI's capacity to carry out subject centred investigations is not there.'*

However, many thought that the capacity (and interest) of local and central government agencies in this regard had diminished in recent years.

> *'Channels for dissemination are general adequate . . . [but] . . . the declining role of local government is making it more difficult to engage with some users.'*

The last point raises the important issue of system constraints on dissemination which are not of researchers' own making. Is the intended audience in a position to accept what researchers

disseminate? If not, how can policy-makers assist the dissemination process?

'Dissemination is a complex process involving many others . . .'

'Some LEAs and some Heads organise researcher-practitioner contacts and events, but not all. And too few have INSET.'

'Advisory bodies of LEAs should do more to enable discussion of research with practitioners.'

Even if the transmission lines (direct and indirect) are working and researchers send out appropriate signals, practitioners need to be able to receive them.

'Effective transmission is also about functioning receivers. It needs engagement with research to be seen as an element in teachers' career profiles, and its inclusion in OFSTED's criteria for assessing mentor support to student teachers.'

'. . . but at the end of the day, the hard facts are that a minority of practitioners who are interested in the outputs of research, either cannot see its relevance to their increasingly over-specified modus operandi, or simply have no time to engage with it.'

For good practice and/or innovation to be effectively disseminated, Hargreaves (1997) has suggested it has to go through as much as a six stage process involving identification, collation, diffusion, adoption, implementation and institutionalisation.

4.2 Impact on practice and policy

The overall message from practitioners is that most education research does not impinge much on practice, and if it does so it is likely to be in an *ad hoc* and individual way:

'The use of research by teachers is patchy unless doing an MEd, they wouldn't see it and wouldn't have time to go find it.'

'Research doesn't have much impact on schools, except sometimes where staff are pursuing individual study. Perhaps there are large gaps in dissemination. It is possible to teach without picking up any research.'

And yet many practitioners who have been exposed to research recognise its value in underpinning teaching practice:

'It is vital to promote increased understanding in the profession. A lot of teaching practice is influenced by research that is not current, such as Piaget.'

4.2.1 Evidence of impact

We invited researcher respondents to identify any areas in which their research had had an impact on policy and/or practice, or in advancing knowledge and understanding. A considerable number gave instances in which such a claim could be made, for example,

on schools performance: 'that's our *raison d'être*'; in teaching and mentoring teachers: 'our job is stimulating ideas'; in assessment, school effectiveness and improvement, education of under-fives, special educational needs, punctuation, use of fractions, 'letter strings', accelerated learning, under achievement of girls, specific national policy initiatives (and so on).

Part of the explanation for the differing views may lie with the complex way in which research can influence practice. Caroline Gipps (1998) for example, presents an interesting example of research (conducted by the Assessment and Performance Unit) and concluded that research:

> 'does impact on practice, although in a far from simplistic route.'

In other words, practitioners may not realise the subtle and behind the scenes influence that research can play in their work.

The significant exception to this perception of lack of impact by practitioners is the application of action research projects. We were presented with a number of examples of teachers applying the results of their research in their classrooms, and where colleagues and other schools would be influenced by the outcome. For example, one teacher told us about her research project which looked at the advice and guidance for sixth formers, and as a consequence of which changed the reporting procedure for sixth formers, resulting in a process that was judged better by staff and pupils.

Another told us that the action research projects taking place in the school had had a definite impact, with everyone tending to 'reflect' rather than 'rush around'. In one school that was pursuing a general action research approach, 15 teachers had been directly involved in one way or another. Other teachers were involved through subject teams and year-based teams, and each team had at least one action research member.

> 'The action learning has changed the school and not just those that were directly involved; it has changed the culture of the school. When the Head came in 1989 it was not a very reflective place; we tended to rush around from one thing to another.'

Teachers also speak of the more personal benefits of research-based higher degrees, becoming more critically reflective, involving other people more, changing the way they work with their teams.

LEAs found that schools which participated in action research generally have it mentioned in their inspection report, and they generally thought it beneficial and influential. However, some of the teacher researchers we spoke to complained about the lack of support from LEAs.

The other main area where research is impacting on practice is in the use of performance data and indicators. This was generally felt to be a current growth area, especially by LEAs which had, in particular, undertaken the task of analysing performance data and

feeding it back to schools. Our respondents felt that there can be impact at individual level, by tracking individual pupil progress, as well as at a subject or organisational level.

The LEA can play a key role in mediating this information (*ie* interpreting and explaining it so that schools/teachers can use it to inform their actions and decisions). However, it seems not all LEAs do so.

4.2.2 Constraints on impact

A number of intrinsic reasons were identified, mainly by our research respondents, as to why the revealed impact of educational research would often be more modest than non-researchers might (and usually do) expect:

> '*The* lead time *from research, to the establishment of general principles to the application of those principles, is frequently long.*'

> ' *. . . the very* diffuse *nature of the progress of research findings and ideas into practice and policy-making. . . .*'

> '*It's only when research-based insights become part of educational common-sense that they really have an impact . . . then, nobody remembers the researcher. . . .*'

> '*Impact is* hard to measure *either in "terms of citation" or of its effect on the subjects of research.*'

> '*How can changes in the complex world of human behaviour ever be* traced back *to single research findings?*'

Some referred to user expectations about the immediacy and scale of impact:

> '*Implementation "problems" [arise from] the fallacious and ineffective perspective that research finds answers to problems which can be handed to practitioners and immediately used without ambiguity, imprecision or problematicity.*'

> '*Research is* not *about helping practitioners to follow instructions. . . .*'

> '*. . . one of the common misconceptions about educational research is that unless it can be used in the classroom tomorrow, it is of little use.*'

> '*We are generally becoming obsessed by practical application. . . . We should beware of an increasingly instrumental mentality.*'

> '*[Critics'] view of usefulness implies that researchers should concern themselves only with investigating teaching and learning in terms of a narrow model of technical efficiency.*'

4.2.3 The role of research in policy development

Perhaps the critical parameter in the implicit (diffuse) impact model is the influence of research on policy formation. As Hegarty (1998b) notes:

> *'Educational and social policies are determined by a mix of factors . . . research evidence does make a contribution, but generally a modest one. It is rare for research findings to determine educational policy.'*

There are a number of issues here and it may be worth distinguishing between the potential for research to influence policy, the process by which this influence occurs and the practice. On the latter, our researcher respondents generally felt that government had paid too little regard to research in developing policy in the past:

> *'Don't imagine that all decisions* start *with research; often the reverse is the case. Policy-makers introduce initiatives which are not allowed to fail. . . .'*

> *'Political contexts (mainly) determine the application of research to practice.'*

The fact that education has been highly controversial politically in the last decade, and the lack of an apparent rational policy formation process, was also a concern for practitioners and LEAs:

> *'education policy is not sufficiently informed by research.'*

Where research was used within a policy context, we found considerable cynicism of the way it tended to be interpreted:

> *'There have been major changes in the last ten years that have not been underpinned by research but by political dogma. These are rolled out before they are evaluated'.*

There was also some concern that some research receives a profile that is 'political' rather than related to the intrinsic merit of the research itself.

There was, however recognition that in more recent times, research findings were beginning to inform policy and therefore exercising more of an influence on practice. It was also pointed out that the new government was generally more committed to an evidence-based policy formation process. However, as one government official confided: '*this has yet to be put to the ultimate test*' by, for example, research showing that new flagship policies were not working or not addressing key issues. That said, the publication of the evaluation of the 1997 summer literacy schools was cited as an example of the government's willingness to accept criticism.

The clear message that came through on dissemination, recent developments notwithstanding, concerned the absence of evidence-based policy formation and development in the field of education. Those charged with implementing policy for research

wanted more prominence of research in the justification of policy initiatives, and for those initiatives to be thoroughly tested and evaluated both formatively and summatively.

5. Conclusions

In this chapter, we set out our conclusions based on the data presented in the preceding chapters. Part of our task was to make recommendations for the future development of educational research. Our specific proposals are set out in the next chapter and flow from the following analysis. Together, these two chapters form an agenda for the DfEE and others to consider at both a strategic and a practical implementation level.

5.1 The links between research, policy and practice

The nature of the linkages between research and policy, and research and practice, are at the heart of much of the current debate on the value and impact of educational research. The notion that research can (and should) have an impact on policy and practice is widely recognised. The key issues revolve around the process through which that impact takes place, the factors that are preventing the process from working efficiently, and the extent and form of the impact that could be expected.

The process of impact is complex and multifaceted, there is no simple model on which to frame an explanation. Various types of research can, and do, have a multifarious impact through a wide range of transmission lines, often over an extended period. Theoretical research can have a critical effect on the overall approach and the culture in which policy and practice are developed, although the timescales are often long term. Applied research can highlight problems, contribute to the development of solutions and, through evaluation, test their effectiveness and value. Action research can influence personal and organisational practice and contribute to personal development. The list is almost endless.

The routes through which research can exert influence are various. It can act **directly** on policy-makers or practitioners, suggesting, changing or confirming a course of action; **cumulatively,** *eg* through adding to the sum of knowledge (Hannon, 1998), 'stock of common sense' or 'professional discourse' (Bassey, 1998); or **indirectly**, *eg* through assessment instruments, curriculum materials, and pedagogic practices (Hegarty, 1998). The route to practice can also be long, mediated through policy-makers (local and national), advisers, administrators and local managers. Policy and practice are also influenced by other factors, political ideology, pragmatism and personal prejudice among them.

There is no simple model. It is a complex process as the linkages between research and policy on the one hand, and research and practice on the other, are likely to be different. The process is further complicated by the influence that policy itself exerts on practice. The more policy prescribes teaching behaviour, the more potential research has to influence classroom practice through policy instruments.

This complexity makes the impact of research difficult to isolate and measure. There is obviously influential work taking place, and good relationships between research and practice in some areas. There is also some evidence that research is beginning to be more influential in informing the development of education policy and, in places, teaching practice encouraged by the TTA. However, given the volume of research, as measured by inputs such as expenditure, or number of research-active academics, or the RAE output, we would have expected to have seen a greater level of impact.

If the purpose of educational research is, as Bassey (1995) argues, to inform educational decisions and educational actions, then our overall conclusion is that the actions and decisions of policy-makers and practitioners are insufficiently informed by research.

Education is not unique in this respect. Management research, for example, is often criticised, on the one hand for lacking quality, and on the other, for insufficient application to practice (Macdonald and Simpson, 1994).

Nor is it confined to the UK. Carnine (1995), commenting on the USA, argues that there are three areas in which 'shortcomings' in educational research constrain the influence of research on practice:

- *trustworthiness* — *ie* the confidence with which a given set of findings can be acted upon by practitioners;

- *usability* — *ie* the demands required to implement a set of research findings;

- *accessibility* — *ie* the ease by which practitioners can obtain research findings related to a certain goal.

There are obvious echoes with the findings of our own study. Also from a USA perspective, Kennedy (1997) has identified four reasons why the influence of research on practice could be constrained:

- *the research is not relevant* — *ie* problems of agenda;

- *the research is not sufficiently persuasive or authoritative* — *ie* problems of quality;

- *research findings are not accessible* — *ie* problems of dissemination;

- *problems within the education system itself* — which Kennedy says could be due to either excessive instability or excessive stability.

While they also apply here, further structural factors serve to weaken the UK system, including a fragmented supply and a lack of clarity of demand. This reflects, in part, a perceived lack of need, and a weak interface between the education and research communities, particularly at the policy-making level.

However, we are optimistic that changes can be made which can improve the capacity of researchers to meet the needs of the policy-makers and practitioners. These need to be accompanied by changes to enable policy-makers and practitioners to assimilate research findings into their decision-making processes and actions. Some of these changes are already taking place, but need further impetus and to be supplemented by further cultural and structural adjustments. Such improvements could result in more soundly (evidence) based policies and practice, and a greater level of understanding about: 'teaching, learning and the institutional frameworks in which they occur.'[1]

In the rest of this chapter we examine these issues in more detail and in chapter 6 we outline our proposals for change.

5.2 Research agenda

In many ways the current system of educational research seems to serve the academic researcher well. There is a high degree of freedom of choice as to the research subject to be addressed and how the research is conducted. This has led to a diverse agenda of research being undertaken, reflecting a range of methodologies (in some of which the UK is at the forefront of development) and subject matter. The output feeds a growing number of academic publications and niche journals focusing on particular interests, which could be associated with a healthy academic process. It was therefore disappointing not to be given more evidence of the intellectual vibrancy of this side of the system.

Elsewhere in the system the non-academic user, particularly at national level, appears to be less-well served, with many arguing that research is difficult to access and, where found, the output is of questionable quality and/or relevance to their (often poorly articulated) needs.

The lack of an effective dialogue and understanding between researchers, policy-makers and practitioners is illustrated by the fact that while most of the researchers felt that the balance of the research agenda was too skewed towards policy and practice, the practitioners and policy-makers generally thought the opposite.

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[1]   Taken from the definition used by Foster (1997) referred to in Chapter 2).

One explanation could be that while the research community is concerned with the research issues, the policy-makers and practitioners are more concerned with quality, accessibility and relevance.

Where the research does address policy-relevant and practical issues it tends to:

- be small scale and incapable of generating findings that are reliable and generalisable;

- be insufficiently based on existing knowledge and therefore capable of advancing understanding;

- be presented in a form or medium which is largely inaccessible to a non-academic audience; and

- lack interpretation for a policy-making or practitioner audience.

This results, at least in part, from a research effort that is predominantly supply (*ie* researcher) driven with the criteria for success, and hence the focus of the output, being dominated by the RAE. Roughly two-thirds of the subject matter of the research spend is determined by researchers.[1] While this does not mean that the needs of education policy-makers and practitioners are disregarded — far from it in some cases — they are not prominent in the overall agenda, nor a major focus for dissemination in the system.

Perhaps the RAE should be better described as the dominant system as there is in effect a second, smaller, sub-system, more focused on the needs of practitioners and policy-makers. This is funded mainly through central and local government expenditure, and sourced both within university education and other departments and outside the university sector, in independent research institutions. However, this too suffers from problems of scale, lack of accumulation of knowledge and is inadequately integrated with the policy development process. Although this is a more demand-led side of the overall system, the focus tends to be more tactical than strategic and therefore unable to influence the policy formation process in a fundamental way. This is due, in part, to difficulties in articulating need and understanding what research has to offer.

Some of these issues may be addressed by the new HEFC/ESRC initiative, but it is unclear whether this will be sufficient to secure a more evenly balanced university-based system which serves all users of research equally well.

A further problem for the policy-maker is that the research agenda tends to be backward rather than forward looking — following policy not prompting it, to paraphrase one of our respondents.

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[1] RAE funded research, plus research activity by degree students and a proportion (assumed three-quarters) of that funded by Research Councils and foundations, and the research done by non-education university departments.

While this is partly due to an emphasis within much of the (limited volume of) government-sponsored research on evaluation, rather than exploration and development, it also reflects a dissonance between the policy-making cycle and the research production cycle.

The pace of change within the policy arena has risen almost exponentially over the past decade and has been given further impetus by a change of government. Some researchers (and many teachers) bemoan the almost break-neck speed at which new policies are developed and implemented. Whether the education service is best served by such rapid activity is not an issue we have been asked to address. But the consequences for the research community are firmly within our remit. The question is whether it is capable of, or is willing to, respond. In our view it should be encouraged so to do, in order to rectify the relative absence of research-informed policy formation, at national and local level.

To be sufficiently agile to support policy formation, the research community has to have both a thriving theoretical and applied base (as advocated by BERA), but both have to be fit for the purposes they seek to serve (which may not be distinct). Two large gaps are apparent:

- **regular and systematic reviews** of research in key areas (of all types, *ie* from large-scale national studies to small-scale theses and Masters dissertations) to establish current states of knowledge and to provide a foundation for future enquiry; and

- **large-scale longitudinal data sets and studies**, to generate sufficient data to enable tracking of the impact of interventions and the influence of intervening variables over time. There may be potential to build on existing institution-based or individual-based data sources and there is also the potential to learn from the datasets derived from the TTA's school-based consortia. However, it may be necessary to build new datasets to ensure the necessary number of cases and range of contextual variables are available.

At the same time, the emphasis needs to shift from promoting the volume of research to promoting quality; additionally, an element of research foresight needs to be built in.

If these changes were in place, we believe that researchers would be better able, not only to respond to the needs of policy-makers in particular, but also be able to prompt policy formation by highlighting up and coming issues that need addressing. However, this requires policy-makers to be more open to assimilating research findings into their decision-making processes than they have been in the past. This requires them to be better at articulating their requirements, more skilful in interpreting results, as well as more philosophically committed to evidence-based policy development. There are welcome signs of change, although it is recognised that such a commitment can be difficult, especially when research results run counter to ideological aspirations.

5.3 The research process

Some of the concerns about the research process centre on the fragmented nature of the **research infrastructure** with the funding structure encouraging too many staff, many with limited or few research skills or time, in too many institutions and centres to undertake research. For example, there is a belief that all staff engaged in teacher initial education need to develop a track record in research, and too little recognition appears to be given to good teaching being a valid end in itself. The skills are different and there is no necessary correlation between being a good educator and a good researcher or *vice versa*. This is not to argue that research should not feed into lecturing and teaching, rather that, in our view, it is not necessary to be an 'active' researcher to be 'research aware' and that those involved in research should have the skills and expertise to do it effectively.

A further influence of the RAE is that the better research departments get the most funds which can be expected to lead eventually to the development of stronger centres of excellence. The logic of the system suggests that over time this should **concentrate resources** on fewer, larger departments who may be able to offer better career prospects and certainly should be able to support research skills development. They could also offer greater prospects of collaboration and the capacity to conduct the large-scale research within the timescales required to contribute to policy formation and evaluation. However, the extent to which this has happened in the first decade of the RAE system is unclear.

Dedicated research centres could also offer these benefits, as well as encouraging and enabling researchers to focus on particular research themes or develop specialist expertise in particular methodologies and approaches. Although there was a view that such centres can be difficult to manage and sustain, there seems to be a case for more dedicated centres. However, there should not be one monolithic model. They do not need to be based on a single funding stream (*eg* by supplementing an element of core funding with competitively tendered contracts). They need not be based exclusively within the university sector. Indeed, more independent research centres alongside university departments would be welcome. Neither need they be sited at one establishment. A 'virtual model' (perhaps along the lines of the new ESRC centre on Skills, Knowledge and Organisational Performance), using modern information and communication technologies, could be a more effective way forward of maximising intellectual economies of scale and dissemination, without the financial overhead of physical integration.

While it is important to maintain a plurality of funding sources to preserve researcher independence, a diverse research effort and avoid monopsomistic behaviour, **greater co-ordination and collaboration** between the funders could be of great benefit in reducing duplication and prioritising agendas. Greater collaboration with researchers, so that the funders, especially the government agencies, better understand the research process and can become more 'intelligent customers' would also be

beneficial. The funders should also consider how best to involve research users and especially teachers in their commissioning, quality assurance and dissemination processes.

While this does not mean that teachers should become researchers, notwithstanding the value of research as a means of professional development, they should be more widely involved as participants in the research process. Separately, teachers and head teachers should be encouraged to base personal and organisational decision-making more firmly on research-based evidence, where appropriate and available.

The overall **quality** of the research output was felt to be inadequate by a large number of our researcher and non-researcher respondents. There is a clear need for researchers to pay greater attention to the methodological rigour of their techniques, and the implications for the weight and value they attach to their findings. Funders and researchers should ensure that their quality assurance systems are thorough, transparent and appropriate to the audience. It can be easy sometimes for researchers to hide behind the deficiencies of their method, to avoid 'coming off the fence' and producing clear findings. Where possible, researchers should be encouraged to interpret their results for non-researcher audiences, or engage with inter-mediaries to help in this process. In addition, non-researchers need to understand better what answers research can and cannot provide.

Peer review is the dominant form of quality assurance in higher education where the vast majority of research is undertaken. Proposals and outlines are peer reviewed by research councils and foundations. The peer review of published outputs (as opposed to a whole research exercise) is fundamental to the Research Assessment Exercise.

The prevailing view among our respondents was that while this was not perfect, it was the best available system. There was concern that any major amendment would affect academic freedom and that it was inappropriate to treat education differently to other academic subjects and fields of enquiry. In our view, academic freedom would not be jeopardised by the inclusion of 'fitness for purpose' in the RAE quality criteria. They therefore should specifically include the relevance and impact to the wider world along with stronger user representation in review panels.

The criteria for the last RAE stated that:

> *'Positive account will be given to the dissemination of research findings in professional journals and related media, where the emphasis is on communicating them to practitioners and/or contributing to policy discussion.'*

However, this did not seem to be the case in practice. There was a commonly held view that such dissemination was not valued. It leads us to conclude that the position of non-academic outputs needs at least clarifying. In our view, they should be encouraged, where appropriate, by the RAE. This could involve broadening the

scope of the review to include user oriented reports and reviews, as BERA has also suggested.

5.4 Dissemination and impact

Practice among researchers on dissemination varies considerably, but the conclusions and implications of much research are not reaching their intended audience and those who could benefit from it. However, this is not just an issue for researchers. Practitioners and policy-makers (*eg* teachers and local and central government officials) need to be 'research aware', *ie* open to and interested in research, and have an understanding of what it can offer. They also need to have access to **intermediary support** to be able to interpret research and assimilate findings into their decision-making processes. This is all part of what one respondent described as being 'functioning recipients'.

Part of the inter-mediation involves improving **accessibility** to research. The burgeoning forest of academic research and papers appears to be increasingly impenetrable to an academic audience, let alone the wider education community. Some organisations (*eg* NFER and a few LEAs) are already playing a helpful role here, but we understand that even with such a dedicated resource, the task of identifying ongoing research is daunting. The suggestion by BERA of an Internet-based library of education research papers would be one small beneficial step forward.

However, we fear that this would not be sufficient, and suggest consideration be given to the establishment of an education information unit (possibly along the lines of the American model, although there are others, for instance in Switzerland and New Zealand, which could also be worth examining). Such a body — perhaps linked to the production of more systematic reviews — could play a strategic role as well as an operational role in developing a dissemination strategy for educational research, working with existing information providers. It could benefit from the experience of the Cochrane Collaboration[1], which plays at least part of the role we envisage here in health research.

In addition, funders and researchers need to pay more attention to **interpreting** their research and presenting the key findings in a form amenable to appropriate audiences. This requires particular skills and expertise (which not all researchers will possess, although they could collaborate with people who do) and such activity will need to be financially supported. In addition to building user-friendly dissemination strategies into their research projects, funders should also consider the possibility of developing and funding more disseminatory projects — perhaps on the back of the systematic research reviews and/or where there is a clear need, as identified by the policy fora.

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[1] The Cochrane Collaboration is an organisation that prepares, maintains and promotes the accessibility of systematic reviews of the effects of healthcare interventions.

Whatever the relevance and the quality of the research and the user-friendliness of the output, its eventual impact will depend on the willingness and capacity of policy-makers and practitioners to take research into account in their decision making and actions. This relies on a commitment to the principle, an understanding of what research can offer, and the practical capacity to interpret research.

We have already noted that research is only one of the influences on policy formation and practice and that any impact is often likely to be indirect rather than direct. However, it is clear from our study that in the past the impact has been diminished by a lack of commitment to basing policy formation, where appropriate, on research and the absence of an effective **mediation infrastructure**, *ie* people and processes through which research is interpreted and assimilated into the actions and decision-making of those engaged in developing, implementing and carrying out education policies. Tackling the first appears to be a matter of resolve. The second relies on a more complex, integrated solution.

It is recognised that a commitment to more evidence-based policy development could cause political difficulties. However, the more effective policies that should result, the easier it will be to convince those involved in their implementation of their value.

In our view, one of the biggest weaknesses of the current system is the absence of the interpretation of research findings to help inform decision-making and actions at all levels. It is not easy to articulate a solution to this issue succinctly, as effective mediation depends crucially on the context — the nature of the research and the knowledge of the practitioner or policy-maker — but it lies at the heart of a system that effectively integrates research, development, policy formation, implementation and reflective practice.

5.5 Funding

Our conclusions indicate that the balance of research funding is insufficiently weighted in favour of the empirical applied research required to help inform the development of education policy and practice. Therefore, proportionally more funding needs to be targeted at certain key areas, *eg* to establish proportionately more research centres of excellence, for large scale research studies, for systematic reviews, to support user focused dissemination, and to encourage a more effective mediation infrastructure.

It is also important to recognise that better quality research may have general resource implications. Educational research, particular at the applied end of the spectrum, is not a desk-based activity. Funders do need to recognise that if the demand is for greater amounts of higher quality applied research (as we have identified) then this implies greater amounts of fieldwork and with a consequent effect on costs.

Does this mean more funding in total, or a redistribution of the existing pot? The existing spend would be more effective if the volume of lower quality research was reduced. However, even if this was the case, we doubt whether current funding levels are sufficient to support the balanced programme of excellent research of all forms (theoretical, applied, action-based and others) necessary to support the required improvements in the general education system. We note that the UK seems to spend comparatively little on education research (see Chapter 2), especially on applied research, given the importance of the policy area. Any increase in funding should be recouped in the longer term through a more effective education service and a more efficient policy implementation process.

At present only a minority of the funding is allocated on a competitive basis, and in some of these cases its distribution is restricted to the university system or related sectors. A widening of eligibility for these funds and a greater use of competitive tendering could result in a sharper focus on the needs of the user and a more efficient use of resources. Care will have to be taken to devise a commissioning process that does not consume undue amounts of researchers' time or funders' budgets.

Finally, if research is to play a greater role in the development of educational policies and practice, then however effectively it is interpreted and disseminated, policy-makers and practitioners will need time to read and assimilate the findings. The resource implications of this additional process should not be under-estimated, although they can be counterbalanced by the extent to which decision-making and actions are more effective as a result.

6. Recommendations

The strategy behind our proposals is threefold. Firstly, it is aimed at better integrating the research and the education practitioner and policy-making communities. It is centred on creating a culture and supporting structures in which each seek to work with each other (rather than exist in separate worlds, as seems to be the dominant case at present) — *ie* creating more **strategic coherence and partnership**. Secondly, we put forward suggestions which we hope will improve the capacity of research to provide support to policy-makers and education practitioners — these centre on improving the **quality** (including the relevance) of the research. Thirdly, we want to enhance the capacity to receive such support, through improving the **mediation** processes and a **commitment to evidence-based policy development**.

We make the following specific recommendations, which we hope will complement many of the changes and improvements which have already taken place in recent years.

6.1 Strategic coherence and partnership

6.1.1 A national education research framework

Part of our diagnosis is that the research system is too fragmented. It could benefit from an overall framework identifying the key players and processes, the relationships between them, and their roles in the development of educational research and its use in policy formation and practice. Such a framework should not be overly prescriptive, but seek to place some strategic coherence across the current diversity and encourage greater collaboration and partnership in all corners of the system.

6.1.2 National Education Research Forum

At the heart of many suggestions for changes in recent years is a body charged with developing a strategy for educational research, to shape its direction, co-ordinate its conduct and support its application. We were initially sceptical of whether such a body would be able to achieve such ambitious objectives, given the current disjuncture between research and policy formation in particular, and also the disparate nature of research and education communities. However, it has become clear that there is an overwhelming need for an overall strategy and framework and that some form of National Education Research Forum needs

to be established to bring it about. We also believe that regional, or in some places local, frameworks and strategies should be encouraged, perhaps through sub-fora. However, it is clear that to work, any such body(ies) should:

- be independent of any one party or stakeholder — while it may fall to the DfEE to take the initiative to establish the Forum, it needs to be owned by all participants and not one sectional interest;

- have a clear remit;

- be realistic about what it can achieve;

- comprise people committed to those objectives, from all the key constituencies, including central government, agencies (including local government); other research funders; researchers, and practitioners — recognising the difficulties in finding people with sufficient experience, credibility and understanding to make an effective contribution;

- not be over restrictive or prescriptive about the sort of research it seeks to promote, as there is a need for a balance of type and subject, but promote the quality of the research output with emphasis on fitness for purpose;

- seek to identify priority themes for research, drawing on the views of research, policy-making and practitioner communities of the current and future issues of major interest and concern (possibly through a regular foresight exercise).

6.1.3 Policy fora

A National Forum is likely to be too unwieldy to focus on particular areas of concern. We therefore recommend that consideration be given to the establishment of complementary smaller theme-based fora in specific areas (such as equal opportunities, disaffection, literacy and numeracy, school management) within which researchers, policy-makers and practitioners would work closely together to:

- establish bodies of knowledge, based on systematic and regular reviews of research and knowledge;

- ensure its effective dissemination, with a clear articulation of the implications for policy and practice at national and local level;

- identify any issues which could be illuminated by further research, co-ordinate the research effort to tackle them, and to ensure their effective dissemination, as above.

These policy fora need to be linked to the National Forum but, in our view, form an important separate element of the framework.

6.1.4 Funder collaboration

We further recommend that the research funders consult regularly with each other on their strategic approach to research; their

research agendas; their application procedures; their quality control processes; and their dissemination strategies, perhaps under the umbrella of the National Forum.

While plurality of funding should be maintained, consideration should be given to the collaborative funding of:

- systematic research reviews;

- projects aimed at disseminating existing knowledge to the wider education community;

- the establishment of large-scale longitudinal studies; and

- the establishment of more research centres, based on a range of models.

All imply changes in the way research is selected for funding (*eg* less emphasis on *new* work in some criteria). We also believe funders should:

- encourage competitive tendering through efficient commiss-ioning processes;

- develop generic quality standards, based around the 'fitness for purpose';

- encourage replication studies, where the knowledge base requires them and the research proposal is appropriate;

- encourage dissemination and interpretation for different audiences (see below).

6.2 Improving quality

Good quality and how it can be achieved should be at the core of any system that aspires to excellence. The development of clearer quality criteria and control processes by research funders, and the development of generic standards, should place the issue of quality at centre stage. In addition, we believe there are some other measures that could be taken.

6.2.1 Quality assurance

We recommend that university education departments and other centres for education research develop and use clear quality assurance processes based around the principle of 'fitness for purpose' and taking account of generic criteria developed by funding bodies. The Code of Practice proposed by BERA could provide an important stimulus.

6.2.2 The Research Assessment Exercise

We recommend that the quality criteria be reinforced to emphasise aspects of relevance to the wider world such as:

- advancement of knowledge, including across disciplines;

- methodological innovation or advancement;
- impact on practice (particularly in areas identified by the national or policy fora).

Not all research need be assessed against each of these additional criteria; it would depend on what it was trying to achieve. We recommend that the criteria on dissemination in non-academic media and collaborative work with teachers and other practitioners be clarified and/or reaffirmed to ensure that they are encouraged and valued. We also recommend stronger user representation in review panels.

6.2.3 Research skills training

We noted the ESRC report's recommendation concerning methodological skills training but it is unclear to what extent this occurs (Gray, 1998). With the proliferation of social research, short second-degree courses on offer, we believe there is scope for all education researchers to undertake professional development. We therefore recommend that university education departments and other research institutions ensure that all research-active staff are suitably qualified in social research techniques, and that funders take account of the research expertise of prospective research teams.

6.3 Mediation between research, policy and practice

The final element of our proposals addresses what we see as a further fundamental weakness in the system: the lack of people and processes to help distil and/or interpret research findings for a practitioner and/or policy-maker audience. As we identified in Section 5.4 it is not easy to set out a clear solution because the process is context dependent. However, there are some general recommendations that can be made.

Mediation needs to be built in at the start of research and we would encourage researchers and research funders to identifying strategies for maximising the impact of the research at the outset. In addition, researchers should be encouraged to identify the audiences for their research and the appropriate intermediaries and target them accordingly.

There are three further interlocking elements that could enhance the impact of research:

- better dissemination;
- wider information exchange;
- a stronger mediation infrastructure.

6.3.1 Dissemination

Clear dissemination strategies should be built into all major research projects at the outset which relate the outputs of the

research to all interested constituencies and identifies appropriate mechanisms for reaching them in a way that is most likely to influence practice. Research departments and institutes should also develop clear dissemination strategies which promote all appropriate forms of interaction with relevant audiences.

Researchers should be encouraged and rewarded for effective dissemination — an issue that funders may like to consider in their collaborative meetings (see Section 6.1.4).

We do not encourage the development of further publications in an already crowded field, but would welcome ways in which existing media (written, televisual and electronic) could be used as a platform to spread research-based knowledge about all aspects of education to the wider community.

6.3.2 Information unit

Consideration should be given to the establishment of an education research information unit(s) to co-ordinate and support the collation of education research, and develop and implement an overall dissemination strategy to ensure that different users have access to the information they need in a form that they can use. Such a unit should work with other information providers and learn from similar bodies in other policy areas and overseas, to identify and fill gaps in information provision.

There are obvious links with the development of the national and policy fora, and an alternative way forward may be to establish thematic-based information units, linked to the policy fora (see Section 6.1.3).

6.3.3 Mediation infrastructure

The National Education Research Forum should examine the mediation infrastructure between research, policy and practice to identify ways in which it could be enhanced. All involved in the delivery of the education service have a potential role to play. Various options which should be considered include:

- the development and strengthening of the role of policy analyst at national (*ie* within the Standards and Effectiveness Unit at the DfEE and among the education agencies), regional and local level;

- the encouragement of school/higher education research consortia to help focus the design, conduct, dissemination and interpretation of research;

- the use of teacher in-service training to discuss and assimilate research findings;

- research strategies and outcomes being built into LEA education development plans and even, where appropriate, school development plans;

- local education advisors and inspectors using their understanding, informed by research-based knowledge to support school or teacher development; and

- research co-ordinators in schools charged with accessing and disseminating research, supported by a comprehensive information service (see Section 6.3.2).

6.4 Commitment to evidence-based policy development

Policy-makers (at national and local level) should commit to ensure that wherever possible, policies are developed on the basis of and/or related to publicly available research evidence, and encompass clear and independent evaluation strategies. Such a policy-level commitment should feed through to practice, where more evidence-based decision-making should be encouraged where appropriate.

6.5 Monitoring progress

As we have noted, there been a number of reviews of education research in recent years. Our final recommendation is that it is time to move forward. To produce a more effective research system requires change by all parties. Some ways forward have been outlined above. There may be others. Changes will need to be monitored and evaluated, and this is probably another role for the National Education Research Forum.

Appendix 1: References

Bassey M (1995), *Creating Education through Research,* BERA, Edinburgh.

Bassey M, Constable H (1997), 'Higher education research in education 1992 to 1996: fields of enquiry reported in the HEFC's RAE', *Research Intelligence* 61, BERA, July

Bassey M (1998), *Fuzzy generalisations and professional discourse*, BERA Internet Conference Paper F, March

Beveridge M (1998), 'Improving the quality of educational research' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Brown M (1998), 'Educational Researchers in Universities: the condition of the workforce', *British Educational Research Journal* Vol. 24, No. 2, April

Brown S, Harlen W (1998), 'A Forum for Researchers and Users of Research — Scottish Style' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Carnine D (1995), 'Trustworthiness, Usability and Accessibility of Educational Research', *Journal of Behavioural Education*, Vol. 5, No. 3

CERI (1995), *Education Research and Development: Trends, issues and challenges*, OECD

Foster P (1997), 'How should we judge the usefulness of educational research?' in the *Times Educational Supplement,* 21 November

Furlong J (1998), *Educational research: meeting the challenge,* inaugural lecture, University of Bristol, Graduate School of Education, April

Gipps C (1997), 'The Funding and Management of Research in Education' *Research Intelligence* No. 62, BERA

Gipps C (1998), 'Some Significant Developments?' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D, (eds), Paul Chapman

Gorard S (1998), Response to BERA Internet Conference, March

Gray J (1993), *Frameworks and Priorities for Research in Education: Towards a strategy for the ESRC,* 1993

Gray J (1998), *The Contribution of Educational Research to the Course of School Improvement,* Professional Lecture, Institute of Education, University of London, 29 April

Gray J (1998b), 'An Episode in the Development of Educational Research' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Hammersley M (1997), 'Educational Research and Teaching: a response to David Hargreaves TTA lecture', *British Journal of Educational Research* Vol. 23(2)

Hannon P (1998), 'An ecological perspective on educational research' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Hargreaves D H (1996), *Teaching as a research-based profession: possibilities and prospects*, Teacher Training Agency Annual Lecture

Hargreaves D H (1997), *A note on the identification and dissemination of good practice*, University of Cambridge School of Education

Hargreaves D H (1998), 'A new Strategy of Stakeholders and a National Strategy for Research in Education', in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Hegarty S (1998), 'A Response from Outside the University System' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Hegarty S (1998b), *On the purposes of research,* BERA Internet Conference Paper C, March

Kennedy M (1997), 'The connection between research and practice', *Educational Researcher* Vol. 26, No. 7, October

Kerr D, Lines A, MacDonald A, Andrews L (1997), *Mapping Educational Research in England,* NFER, November

Macdonald S, Simpson M (1994), *The Quality of Management Research: Implications for Industry*, a contribution to the Review of Management Research in Australia, University of Sheffield

McIntyre D (1997), 'The profession of educational research', *British Educational Research Journal* Vol. 23, No. 2

McIntyre D (1998), 'The Usefulness of Educational Research: An Agenda for Consideration and Action,' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

May-Bowles J (1998), 'The Dissemination of Research Findings', Paper E to the BERA Internet Conference, March

Murphy R (1998), 'Misleading Prognoses: Educational Research in Action,' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Ranson S (1995), *The Future of Educational Research: Learning at the Centre,* ESRC

Research Intelligence (1998), 'IES Call for evidence', *Research Intelligence,* No. 63, February

Research Intelligence (1998b), 'BERA's Response to the DfEE Enquiry', *Research Intelligence,* No. 64, May

Reynolds D (1998), '*Teacher Effectiveness'*, Teacher Training Agency Corporate Plan Launch, 1998 to 2001

Rudduck J (1998), 'Educational Research: The prospect of change . . .' in *Educational Research: The Challenge Facing Us,* Rudduck J and McIntyre D (eds), Paul Chapman

Smithers A (1997), 'Education: view from here', *The Independent*, 18 September

Stoney S, Johnson F, Gallacher S (1995), *Review of Government-Funded Educational Research and Development in Europe,* NFER

Sutherland S (1997), *Teacher Education and Training: a study,* National Committee of Inquiry into Higher Education, July

Teacher Training Agency (1997), *Teaching Matters*, Autumn, p. 14, TTA

Tooley J and *Darby D.* (1998), *Education Research: An Ofsted Critique,* OFSTED

Appendix 2: Research Methodology

Below we provide more details of the fieldwork.

A2.1 Face-to-face interviews

We conducted 40 face-to-face interviews during the course of the project. Interview subjects were chosen, on advice from the Steering Group, with the aim of covering a range of interest groups and view points.

Initially the discussions were completely open ended. We were interested in ensuring we picked up on all the issues of concern, rather than rely on our research specification. After the initial round of ten interviews, we focused on five key areas (set out in the paper in Appendix 4) which also formed the basis of our call for evidence. Towards the end of the fieldwork we took the opportunity to test out emerging findings from the fieldwork and potential solutions to the problems outlined.

A2.1.1 Sample composition

Given that some organisations play multiple roles, simple categorisations can be difficult to draw up. However, the broad balance of the interview sample was:

- 17 people from research organisations;

- 14 people from policy bodies and/or research commissioning and sponsoring organisations;

- nine others including people from local education authorities, trade unions and other representative bodies.

A2.2 Calls for evidence

We wrote to three groups of stakeholders asking them for their views on all aspects of the educational research process: education researchers, local education authorities and trade unions/representative organisations. The letters outlining our (rather grandiosely entitled) call for evidence are set out in Appendix 4.

A2.2.1 Researchers

We sent out 194 letters to a list of research institutions drawn from a database compiled by NFER and used for their recent review (Kerr *et al.*, 1997). We had limited time to select a sample frame and wanted to cast our net as wide and as cost effectively as possible and therefore chose to go to a named contact (often the research co-ordinator) in each institution, rather than a list of education researchers (such as the BERA membership list to which we were kindly offered access) which we feared would not be comprehensive. However, in addition to our letter to each institution the call was published in the BERA newsletter (Research Intelligence, 1998) and on the BERA website for its Internet Debate. Also, the fact that we were conducting the review and interested in evidence was published in the *Times Educational Supplement*[1].

We received a total of 66 replies from individual educational researchers or people who had collated the views of some or all of their colleagues in the institution. Of these, 47 were substantial replies addressing the issues in which we indicated we were interested. The rest included brief responses and replies from people declining to participate. In all we received replies or conducted interviews with people from 38 different institutions, including two from Wales and two from Scotland.

Two-thirds of our respondents (interviewees or those replying to our call for evidence) came from higher rated institutions (*ie* ones with a 4, 5 or 5* rating). This in part reflects the fact that most of our interviews were conducted with prominent researchers. Furthermore, we were more likely to obtain a response to the open call for evidence from departments with large staff complements, and in fact we got a number from some of the higher rated institutions. Whatever the reason, they are over-represented in our sample, as only around a half of the researcher population works in the higher-graded institutions (Murphy, 1998).

Non-response

We have some information on non-response. Those (12 people) to whom we spoke, or who wrote back declining to take part, gave one of two main reasons:

- the main reason for not replying was that they did not carry out any educational research (eight out of 12) — we deliberately tried to cast a wide net, hence going to 194 organisations compared with the 104 involved in the RAE;

- two said they were too busy had too little time to give a considered response.

The other two made no comment.

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[1] *'Shake-up on the way as research is scrutinised'*, David Budge, TES 20 February 1998.

A2.2.2 Local education authorities

We sent out 160 letters to local authorities and similar organisations and received 13 usable responses, mainly from authorities engaged in research.

A2.2.3 Trade unions and representative organisations

We sent out 13 letters to representative organisations and received two replies.

In addition we received nine unsolicited responses, mainly from individual teachers, who heard about our enquiry in the TES or elsewhere.

A2.3 Focus groups and practitioner interviews

We set up a series of six focus groups with teachers, advisers and inspectors. In two cases, they in fact turned into a series of one-to-one interviews (with five LEA advisors and inspectors). In the other four cases we conducted discussions with two separate groups of students on a Masters in Education course, with a group of teachers in a secondary school and another group in a primary school, which again turned into a series of one-to-one interviews. In each school we also interviewed the headteacher and went to a further school and interviewed the head and a teacher/researcher. In all we talked to 23 teachers and headteachers.

The discussions were centred around an interview schedule, set out in Appendix 4.

A2.4 Reflections on the method

It is a rare researcher that finishes a study without feeling that they could have done things better if they had known at the start what became apparent by the end. We are no exception and make the following observations on our approach and detailed method. Ideally we would have:

- included a further element of data collection — while the qualitative approach was very valuable, we would liked to have been able to supplement it with more quantitative attitudinal data, particularly from a representative sample of practitioners;

- contacted lesser known researchers — the people we spoke to and heard from had the advantage of experience and reflection, but the view from the top looking down is not necessarily the same as the view from the bottom looking up;

- looked at practice elsewhere — we feel that there are lessons to be learnt from other systems both overseas and closer to home, *eg* Scotland, and with more time and/or resources we would have liked to have had a comparative element to the study.

Appendix 3: Contributors to the Project

The following people and organisations took the trouble to make significant inputs to the study, either by agreeing to be interviewed, taking part in discussion groups, or making a written contribution. In addition, many others made further verbal or written inputs. We are extremely grateful to all of them for their time and interest.

Dr Muriel Adams, University College of Wales, Newport

Ms Christine Agambar, OFSTED

Prof. Richard Andrews, School of Lifelong Learning and Education, Middlesex University

Prof. Stephen J Ball, King's College, London

John Bangs, NUT

Prof. Michael Barber, DfEE

Mr Richard Bartholomew, DfEE

Prof. Michael Bassey, BERA

Dr Derek Bell, Liverpool Hope University College

Prof. Joan Bliss, UCET Research & Development Committee

Prof. David Bridges, University of East Anglia

British Educational Research Association

Prof. Margaret Brown, Kings College, London

Prof. Christopher Brumfit, University of Southampton

Mr David Budge, Times Educational Supplement

Ms Marianne Coleman, University of Leicester, School of Education

Ms Hilary Cooper, University College of St Martin

Dr R Corden, Nottingham Trent University

Ms Philippa Cordingley, PACCTS

Dr M J Cox, School of Education, King's College London

Prof. Paul Croll, The University of Reading

Prof. Cedric Cullingford, Huddersfield University

Prof. Rosemary Deem, Lancaster University

Denbigh School, Milton Keynes

Prof. Anne Edwards, University of Leeds

Prof. John Elliot, Centre for Applied Research in Education

Prof. Michael Eraut, University of Sussex Institute of Education

Ms Jane Erricker, King Alfred's College of H E

Ms Sue Evans, East Sussex County Council

Brian Fender CMG, HEFCE

Prof. Carol Fitz-Gibbon, University of Durham, School of Education

Dr Peter Foster, Crewe School of Education

Revd Leslie J Francis, Trinity College

Dr Elaine S Freedman, University of Bath

Prof. Caroline Gipps, Institute of Education, University of London

Ms Ros Goldstraw, MPLE Research Support Team, ESRC

Dr Marilyn Goodman, London Education Research Network

Prof. John Gray, Homerton College

Prof. Morwenna Griffiths, Nottingham Trent University

Dr Mary Hamilton, Lancaster University

Prof. Martyn Hammersley, Open University

Prof. David Hargreaves, University of Cambridge

Mr Sean Hayes, London Borough of Hammersmith & Fulham

Dr Seamus Hegarty, NFER

Dr Jane Hemsley-Brown, University of Southampton

Mr Tony Hill, Birmingham LEA

Prof. Phil Hodkinson, Manchester Metropolitan University

Prof. Celia Hoyles, Institute of Education, University of London

Prof. David Hustler, Manchester Metropolitan University

Dr Mary James, Cambridge University

Dr Keith Jones, University of Southampton

Mr Paul Lincoln, Essex LEA

Prof. Pamela Lomax, Kingston University

Prof. Roy Lowe, University of Wales, Swansea

Mr Gilbert MacKay, Strathclyde University

Mr Jim McNally

Prof. Margaret Maden, Keele University

Mr Tony Martin, DfEE

Dr Trisha Maynard, University of Wales, Swansea

Dr Rosamond Mitchell, University of Southampton

Ms Anthea Millett, Teacher Training Agency

Prof. Donald McIntyre, University of Cambridge

Prof. Peter Mortimore, Institute of Education

Dr Louis Murray, Portsmouth University

Mr Tim Oates, QCA, Quality Curriculum & Assessment

Peacehaven Infants School

Mr Roy Phipps, College of the University of Leeds

Prof. Andrew Pollard, University of Bristol

Dr Rosemary Preston, Warwick University

Dr Helen Quigley, Nuffield Foundation

Dr Norman Reid, Glasgow University

Prof. David Reynolds, University of Newcastle

Dr B Richards, Reading University

Dr Paul Rolph, College of St Mark & St John

Saltdean Primary School

Mr Nick Sanders, DfEE

Ms Judy Sebba, DfEE

Ms Linda Shaw, Centre for Studies on Inclusive Education

Ms Rowie Shaw, NAHT

Dr Christine Shiu, The Open University

Mr Rob Smith, DfEE

Prof. Geoff Southworth, Reading University

Dr Andrew Stables, University of Bath

Prof. Ian Stronach, Didsbury and Crewe Schools of Education

Mr Bill Tagg, Tagg Oram Partnership

Prof. Richard Taylor, Universities Association for Continuing Education

P. Thonemann, Mill Hill School

Dr James Tooley, University of Manchester

Dr Peter Tymms, University of Durham

University of Cambridge School of Education

Dr J R Watson, King's College London

Prof. Geoff Whitty, Institute of Education

Mr Ivor Widdison, Local Government Association

Prof. Alison Wolf, Institute of Education

Mr Chris Woodhead, OFSTED

Mr Bill Wright, NAEIAC

Dr Anne West, Centre for Educational Research, LSE

Appendix 4: Research Materials

Educational research call for evidence

Dear Colleague

Review of Educational Research

To the best of our knowledge your organisation is involved in educational research. I am therefore writing to you to ask for your help with a review of educational research relating to schools we are conducting for the Department for Education and Employment. As part of the review we are seeking the views of educational researchers on all aspects of the research process relating to schools. We would therefore be extremely grateful if you could respond to our enclosed 'call for evidence' and also pass on the call to all your colleagues involved in educational research. I have enclosed two copies. Please feel free to photocopy the two page document if you require further copies, or alternatively let us know and we will send you some more.

As you will appreciate, time is tight. We apologise for the rush, but are keen to involve as many people as possible in our review in the time allowed. Therefore we very much appreciate your help.

If you are not involved with educational research, please accept our apologies for contacting you. However, we would be very grateful if you would either pass this letter and enclosures to an appropriate education researcher in your organisation or just return this letter to us in the reply paid envelop provided.

Thanks again for your help.

Yours sincerely

Jim Hillage
Senior Research Fellow

The Educational Research System: Five Key Aspects

The following seem to be the 'key' features of the system which have come under greatest consideration in recent debates within the research community.

1. **Setting the Research Agenda**
   What constitutes research and does the right balance exists between the various forms of research? What are the mechanisms for identifying research priorities? How does the balance of research effort relate to policy priorities? Is there a need for more strategic co-ordination of the research effort? Do funding arrangements and the rewards to researchers (*eg* through the RAE) detrimentally or beneficially influence the research agenda? Should practitioners be more actively involved in commissioning?

2. **The Research Process**
   Does new research take adequate account of relevant work already done? Are there barriers which make it difficult for researchers to do this? How might (alleged) duplication of research effort be minimised, in the interests of quality and value for money?

3. **Review and evaluation**
   Are there adequate quality assurance procedures and guidelines to which researchers should work? Do funders and/or research organisations need to improve their process standards? What are the strengths and weaknesses of peer review arrangements as a determinant of what is/is not 'quality' research? How might they be improved or supplemented?

4. **Dissemination**
   Are there adequate channels for disseminating research findings to other researchers, and to other stakeholders? In particular, are there problems of access, particularly for practitioners? What (if any) alternatives would you like to see in place? What responsibility should the other stakeholders take for supporting dissemination by researchers, and access by practitioners?

5. **Implementation**
   Does the system place sufficient emphasis (in appropriate types of research) upon practical application? What are the barriers, (beyond those already mentioned above), and how might they be minimised? What are the relative responsibilities of researchers and practitioners (or others) for moving research into implementation?

Local authority call for evidence

Dear

IES Review of Educational Research

We have been commissioned by the DfEE to carry out a review of educational research relating to schools. The review will cover all aspects of the research process, from funding to dissemination, and will recommend ways in which the system (or aspects of it) might be improved.

In pursuit of this aim we will be seeking the views of as many as possible of the main 'stakeholders' in the system *ie* policy-makers, funders, practitioners and researchers. Local Education Authorities obviously fit a number of these categories and we would be very pleased to hear your views on all aspects of the education research process.

In particular we are interested in the following:

● **the research agenda** — *eg* is research being conducted into the issues currently being faced by your authority? If not, where are the gaps? Is there a correct balance between theoretical and applied research?

● **the research process** — *eg* is the research that is being done of sufficient quality to meet your needs? To what extent should teachers and other practitioners be more or less involved in the design and conduct of research?

● **accessing research** — *eg* is education policy/practice sufficiently informed by research? Are there sufficient disseminatory and advisory mechanisms in place to ensure that you, advisers, inspectors and teachers have access to the research you need to inform your decision, advice or practice?

In all cases we are particularly interested in ideas as to how things could be improved, from your perspective.

If you would like to contribute your views on any (or all) of these aspects (or indeed, other aspects which you perceive to be relevant) I would be delighted to hear from you. Because we have to report to the DfEE in May, we would be grateful if you could respond by 17 April at the latest.

Be assured that will regard all responses as 'in confidence'; no individual (or organisation) will be identified either in our report to DfEE, or to anybody else.

Should you have any queries about the review or wish to discuss your response in more detail please let us know and we will try to contact you further by telephone.

I look forward to hearing from you.

Yours sincerely

Penny Tamkin
Research Fellow

Trade union call for evidence

Dear

IES Review of Educational Research

We have been commissioned by the DfEE to carry out a review of educational research relating to schools. The review will cover all aspects of the research process, from funding to dissemination, and will recommend ways in which the system (or aspects of it) might be improved.

In pursuit of this aim we will be seeking the views of as many as possible of the main 'stakeholders' in the system *ie* policy-makers, funders, practitioners and researchers. We would be very pleased to hear your views on all aspects of the education research process as users of research, as contributors to the policy-making process and of course as representatives of teachers, the ultimate practitioner.

In particular we are interested in the following:

● **the research agenda** — *eg* is research being conducted into the issues currently being faced by your members? If not, where are the gaps? Is there a correct balance between theoretical and applied research?

● **the research process** — *eg* is the research that is being done of sufficient quality to meet your needs and the needs of your members? To what extent should teachers and other practitioners be more or less involved in the design and conduct of research?

● **accessing research** — *eg* is education policy/practice sufficiently informed by research? Are there sufficient disseminatory and advisory mechanisms in place to ensure that advisers, inspectors and teachers *etc.* have access to the research you need to inform your decision, advice or practice?

In all cases we are particularly interested in ideas as to how things could be improved, from your perspective.

If you would like to contribute your views on any (or all) of these aspects (or indeed, other aspects which you perceive to be relevant) I would be delighted to hear from you. Because we have to report to the DfEE in May, we would be grateful if you could respond by 17 April at the latest.

Be assured that will regard all responses as 'in confidence'; no individual (or organisation) will be identified either in our report to DfEE, or to anybody else.

Should you have any queries about the review or wish to discuss your response in more detail please let us know and we will try to contact you further by telephone.

I look forward to hearing from you.

Yours sincerely

Penny Tamkin
Research Fellow

Education Research Discussion Guide for Practitioners

Current issues in education

What do you see as the critical issues from a practitioner perspective?

- in terms of teaching methods
- management issues
- curriculum development *ie* certain subjects such as maths or languages.

What is the current debate over these issues?

Why are they critical?

What would help you as a practitioner?

What help is available to you? Is it enough?

Has education research addressed these issues? Successfully? *Explore the relevance of education research to the practitioner imperatives, their awareness of its contribution, any problems of interpretation or access.*

How might research help with these issues, what kind of research would be useful?

Best practice

Where does 'best practice' come from? How do you inform yourself about teaching options and their effectiveness? Do you have a role in disseminating this to others? How do you do that? How do you monitor its effectiveness?

What professional networks are you part of, what role do they play in best practice?

What on-going training and development do you get? Are elements of best practice incorporated into this? In what ways?

Research

How accessible to you are the results of education research? Do you feel well informed?

Where do you get this information, *Probe for information via unions, professional bodies, literature ie TES, LEAs, inspectors etc.*

What research do you get to hear about? How relevant is it to your needs?

What is the process whereby research gets turned into practice?

Have you conducted any research yourself? What was this part of? *ie* Teacher training, part of a course of study, a masters degree, self started *etc.*

How did you use the outcome, how did you disseminate the results if at all? How did you find the process?

Do you get any assistance in accessing research results or best practice from other schools *ie* information officers *etc.* Is this useful?

Does the current research agenda address the needs of practitioners, if not why not? What would you like to see?

What is your view of education research? What has helped form this view?

Ideas for improvement

How do you think things could be improved? Do you think there are problems with the research agenda, the dissemination of research or both?

What would you most like research to address?

Any other ideas or thoughts?

Appendix 5: Abbreviations

BERA	British Educational Research Association
CERI	Centre of Educational Research and Innovation
CIDREE	Consortium of Institutions for the Development of Research in Education in Europe.
CLEAR	Council of Local Educational Authority Research programme
DfEE	Department for Education and Employment
ESRC	Economic and Social Research Council
GTC	General Teaching Council
HE	Higher Education
HEI	Higher Education Institution
HEFCE	Higher Education Funding Council for England
LEA	Local Education Authority
LGA	Local Government Association
NFER	National Foundation for Education Research
NAIEC	National Association of Education Inspectors, Advisers and Consultants
OFSTED	Office for Standards in Education
QCA	Qualifications and Curriculum Authority
RAE	Research Assessment Exercise
SCRE	Scottish Council for Research in Education
TES	Times Educational Supplement
TTA	Teacher Training Agency