the agency responds

National Educational Research Forum consultation

Andrew Morris
Contents

Introduction 1
The Agency's response 2
Introduction

1. The National Educational Research Forum issued a consultation document on its proposals for a research strategy in autumn 2000. This report is the response of the Learning and Skills Development Agency. The Agency has been pleased to contribute to the work of the Forum through its subgroup and welcomes the development of a high-profile national strategy on research. We are particularly concerned to support the strategy in relation to post-16 education and training across the new learning and skills sector.

2. The Learning and Skills Development Agency is the national, government-sponsored organisation with a remit from the Secretary of State for research, support for policy development and implementation, curriculum development and innovation, dissemination of good practice, quality improvement and the delivery of professional and organisational development programmes.

3. The Agency has a particular brief to build research capacity in the learning and skills sector. The DfEE has asked us to do this in collaboration with the research community and end-users of research. The DfEE is concerned that further education and adult learning are underresearched. The key initial priority for the Agency’s research is work-based learning, which is the most seriously underdeveloped research field in the new learning and skills sector.

4. The Agency is developing, in discussion with the DfEE and the Learning and Skills Council (LSC), a new centre for learning and skills research, which will prioritise the creation, development and updating of research-related information and skills, in order to provide a more coherent platform for the development of research.

5. Our responses and comments, presented in this report, reflect the Agency’s strategy and priorities in supporting the challenging and timely agenda set out by the National Educational Research Forum’s consultation.
The Agency’s response

QUESTION 1
What requirements might be needed to supplement and make best use of these resources?

6. The Learning and Skills Development Agency is working with the EPPI initiative. It is also directly concerned with organising and presenting findings from research on post-16 learning and skills in a way that is useful to practitioners, managers and policy makers. The systematic review approach of the EPPI Centre is welcomed. However, it is a time-consuming and expensive process, not least because it is so rigorous. The need to distil, synthesise and present research findings on many practical and policy issues is, however, very pressing. We are, therefore, concerned to find simpler ways of doing this, which retain rigour but enable timely progress on pressing problems.

7. Our experience to date suggests that simply distilling findings from research, databasing them, reassembling them and redirecting them to target audiences is unlikely to work because research findings are so heavily dependent on the context in which they are found.

8. Current experimental work at the Agency involves the use of the worldwide web to present research knowledge at different hierarchical levels connected through hypertext links. More details are provided in our response to question 30.

QUESTION 2
How might an educational research register be further developed and used?

9. A national register of research is desirable, in principle. Limited experience of trying to database research at the Agency suggests the following problems:

- A lot of significant research, particularly that which is close to policy, is of short duration. This makes tracking the starting and finishing of projects a complex administrative procedure.
- Titles alone do not adequately describe projects. Information on methods, scope, sampling and so on are needed, as well as summaries and names of key factors.
- Some indication of the contexts for the research and its limitations is needed so that enquirers can estimate its relevance for them.

10. It may be of greater value to register the research interests of people and organisations, then invite the enquirers to make contact with one another.

11. We are aware of the recent growth in attempts to record research in post-16 education and training through the ‘observatories’ and ‘regional intelligence units’ being developed within each Regional Development Agency area. There is likely to be a variety of different ways of classifying research in different regions.

12. As it is unlikely that a single standard will be established for registering research, one way forward might be to develop protocols for different levels of description, starting with title and lead researcher, through methodological information to research findings. The use of hypertext links on the worldwide web can then enable the enquirers to determine their pathways to retrieving the information they need.

13. The register could also lead to the commissioning of meta-studies and reviews – particularly topic-based annual updates and ‘critical’ reviews which evaluate the validity of findings.

QUESTION 3
In what format(s) should research findings be presented to be of most use to teachers, learners and others?

14. We have not investigated precisely what material teachers and learners wish to use. However, our experience suggests it needs to include:

- scale, method and range of participants
- clear, concise bullet points stating the findings of research, their limitations and the context in which they were derived
- clear statements of the implications of these findings
- guidance on the use of models or other applications arising from the findings
- indications of the particular circumstances in which particular strategies work
- projection of potential impact.

15. We have developed three distinct formats for presenting the findings of a given piece of research: an executive summary for policy makers and managers, a guidebook for teachers and a full report for researchers.
QUESTION 4
What are the envisaged uses by teachers, learners and others of research findings presented in this way?

16. For teachers and learners, uses include:
- support for their own development
- enhancement of the teacher’s role in the classroom
- broadening the knowledge of learners in a particular subject.

17. Middle managers and developers, whose primary role concerns them with innovation and change, also need to use findings for:
- assessing the risks of implementing new models or acting on findings
- indicating the costs and benefits of altering practice in the light of the research findings.

18. Strategic managers are particularly interested in longer-term strategic implications, risks, benefits and costs.

QUESTION 5
How can we take forward an initiative to inform the development of agreed quality criteria in the design and conduct of educational research?

19. The range of quality criteria indicated is welcomed, particularly the less easily defined ones: fitness for purpose and accessibility. To design consensual quality standards on these will be challenging. It will clearly need to involve a wide range of factors connected in some way with the research process. This is likely to include policy makers, managers, institutional, regional and national strategists, and a range of practitioners, such as teachers, librarians, technicians, careers advisers and pastoral tutors as well as researchers themselves. The practitioners will need to be particularly influential in the design standards for:
- identification of priorities
- specification of research projects
- distillation, synthesis and interpretation of findings
- drawing out implications for practice and policy
- models and other artefacts for practical use
- testing out the contexts in which findings may be used in practice.

20. The new kinds of quality criteria, such as fitness for purpose and accessibility, may be more difficult to standardise than those for which criteria are already in use. Practitioners and policy makers will need to think through what these criteria actually mean from their own experience. This suggests that research is needed to investigate the connotations of ‘fitness for purpose’ and ‘accessibility’ among different communities. Models of quality criteria that could be tested in practice would also be helpful. The findings of such research and development could subsequently be interpreted collectively by groups of researchers, developers, practitioners, managers and policy makers.

QUESTION 6
How can we ensure that agreed quality criteria are applied by researchers, funders, journal editors and others?

21. For the agreed quality criteria to be applied effectively, they must be meaningful and useful within many different contexts and used by influential research funders such as the HEFCE, the ESRC, the Teacher Training Agency (TTA), this Agency, the LSC, the National Institute of Adult Continuing Education (NIACE), the Basic Skills Agency (BSA), the Qualifications and Curriculum Authority (QCA) and the National Foundation for Educational Research (NFER).

QUESTION 7
How, and in what form, should horizon scanning and foresight be introduced into education?

22. Horizon scanning and foresight in educational research are important. For post-16 research it is particularly helpful if the form of these activities reflects similar research on economic and social trends. The DTI ‘Foresight’ programme has one approach, the ‘Tomorrow Project’ (led by Richard Worsley and Michael Moynagh), has another; those concerned with labour markets, such as the Training and Enterprise Councils and associated parts of the DfEE, have others. For some issues, such as participation rates for 16 year-olds or entrance rates for universities by social background, quantitative trend analysis and extrapolation is valuable. For others, we have found it more helpful to build a range of scenarios and explore a number of different options for the future using mixed groups of experts.

23. Scenario-building approaches are proving useful, in our experience, for identifying possible future trends that are common to several different scenarios and therefore more likely to occur.
QUESTION 8
What uses might be made of horizon scanning and foresight resources in education?

24. Particular uses in post-16 learning are:
   - informing policy development
   - promoting informed debate in support of the development of a learning society and economic prosperity
   - encouraging comparative approaches across the globe and over time
   - helping colleges and other post-16 learning and skills providers to plan strategically, particularly in relation to skills shortages and occupational changes in the labour market
   - helping providers with strategic planning in relation to customers and competitors
   - helping those planning research and development projects to anticipate problems in practical and policy areas for which investigations, models or practical tools will be needed. Two examples from the post-16 sector are:
     - modelling new qualifications (for example, an overarching certificate at advanced level) or patterns of provision (for example, for specialist vocational educational centres)
     - developing tools for diagnosing individual needs for literacy, numeracy and IT skills.

QUESTION 9
What opportunities might be opened up, for example, into the UK’s international educational role, or interaction between education and other sectors, particularly through the use of electronic communication?

25. Foresight and horizon scanning will depend on sharing data and on dialogue between specialists in different communities – such as institutional leaders, universities, major industries and national educational and training bodies. A web-based service, in which conferences can be held virtually, documents developed collectively and hypertext links made easily, is a possible way forward. The Agency is aware of specific software for this, developed with EU funding for transnational research and development.

QUESTION 10
What criteria should be considered for selecting an educational problem or opportunity as a priority for research?

26. It is important that priorities are selected and that some priorities are adopted consistently across the different phases and sectors of education and training. The question of coherence in prioritisation between economic, educational and training bodies is particularly important for post-16 research. Consistency between the research priorities of the LSC, DfEE, ESRC, QCA and the Agency would be helpful to those using research and for the development of synergy between different research projects.

27. Establishing priorities will involve the blending of views from:
   - planners, managers, teachers, parents, employers and learners
   - governmental and other national and regional policy organisations
   - the research community itself
   - opportunities arising from the development of technology and increasing understanding and knowledge.

28. Criteria will need to include practical considerations such as:
   - the likely level of demand from educational providers for the anticipated outputs
   - the likelihood of producing applicable findings, models or tools
   - the likelihood that the above can be customised to practical use in different contexts
   - the likelihood that the outcomes of research will arrive in time to make a significant difference to practice or policy
   - the evidence that research would be a more suitable approach than, for example, development training or campaigning.

QUESTION 12
Should the Education Priorities Group also be given the responsibility for implementing the process and advising on priorities for research and development in education?

29. It seems sensible for the Education Priorities Group also to be responsible for implementing the process.
QUESTION 13
How should different interested parties in education, including parents, teachers and researchers, have input into this process?

30. The Agency has experience of establishing research priorities by consulting college staff, researchers and practitioner-based advisory groups. We have found that support and advice are needed to help the various contributory groups make sense of their task. For example, a consultation seminar that invites people to offer their opinions may be less effective than a dialectical process in which the limitations of research are discussed at the same time as the desirability of solving particular practical problems. This suggests that a process is needed in which the expertise of the Education Priorities Group would be used to facilitate the contributions. However, the ultimate advice on priorities should emerge not from the Education Priorities Group but from the synthesis of responses from consultees.

QUESTION 14
How can existing experience in education and other sectors be drawn upon to construct an impact model for research and development in education?

31. The two issues referred to in paragraph 7 of the consultation document need separate consideration:

- ensuring that research findings have an effect on policy and practice
- developing methodologies for studying and measuring these effects.

32. On the first of these, we must take steps to introduce the research community to the practice community more systematically than at present. Moves must be made in both communities to extend their range of responsibilities. Researchers will need to take risks with interpreting their findings in the context of practical use and, likewise, practitioners will need to interpret the outcomes of research as part of their professional development. The latter has implications for the content of initial and continuing professional development but it also has implications for developmental priorities within schools and colleges.

33. A common way for practitioners to engage with findings from research is to themselves become research participants. This may be through action-research or, as is more common in post-16 education and training, through participating in small-scale, localised projects. It may be possible to build on participation in small-scale projects to introduce practitioners to research writing that impinges on their area of interest.

34. Capacity must be increased in the intermediate zone between research and practice. This needs to lay emphasis on:

- distilling the key points from research
- clarifying the limitations or context in which the research is valid
- synthesising research outcomes from a range of independent projects
- interpreting research outcomes for practical use.

35. This capacity must be built through cross-sector team working, involving researchers, developers and practitioners.

36. On the second issue, we have very limited experience of studying and measuring the effects of applying research in education. We are, however, aware of potential methodologies involving the tracing of particular interventions on particular outcomes (for example, for particular forms of sex education intervention). We are also aware of interesting analogues in the field of healthcare, where direct studies of the impact of research knowledge on the behaviour of practitioners have been made. Our suggestion is that similar studies could be designed for education and training. It might be that some studies should be designed as experiments where the measurement of impact is built into the research or intervention proposed. An example might be to experimentally monitor the impact on learner achievement of two or three alternative strategies for assessing key skills within GNVQ programmes.

37. Other suggestions are:

- greater use of long-term investigations where it takes a long time to impact on the community at large
- the development of accounting and auditing techniques which evaluate research spend/research impacts in terms of their contribution to student success and, inter alia, economic value.
QUESTION 15
How can we ensure that research intended to have an impact is designed and funded with in-built measures of impact from the outset?

38. We fully agree with the Forum’s view that measures of impact need to be designed and built-in from the outset. As this is a radical departure from current practice, our advice is to introduce it experimentally on a small scale, and to study it carefully. For some topics of research it will be relatively straightforward to design measures of impact, for others the difficulty of doing so may well distort what would otherwise be valuable research.

39. One practical way through this in post-16 research is to design a number of policy-orientated or practical projects as experiments. This would go beyond simply piloting or evaluating a preferred strategy. It might involve setting-up and testing a range of alternative strategies in a way that controls some of the variables.

40. Conceptually, such an initiative requires a shift from thinking of preferred solutions or best practice towards an agnostic attitude towards outcomes. Outcome measures usually need to involve a mixture of quantitative measurements of effects on performance of individuals or systems with qualitative recording of perceptions and attitudes. An example from post-16 research might involve:

- selecting a range of different groups of learners planning their progression to higher education
- selecting a set of distinct strategies involving schools, colleges and careers advisers
- measuring outcomes in terms of actual progress to university and the perceptions of all concerned.

QUESTION 16
What effect would including these built-in measures from the outset have on educational research and development?

41. It would focus research projects towards outputs which do have an impact and are not purely academic or theoretical in nature.

QUESTION 17
What negative consequences might be foreseen if these measures are not in-built from the outset?

42. Research would continue to be isolated from practice and would, therefore, be of limited use to practitioners. This would continue to limit its potential for impact.

QUESTION 18
What form might an ‘Educational Research Funders Group’ take in order that it sufficiently carries weight but is manageable in terms of size?

43. The development of a Research Funders Group to encourage greater coherence in the allocation of funding is welcomed. We would support the extension of this to cover both research and development within education and training.

44. Given that it needs to be of a small, manageable size but to reach all significant sources of funding, it may be advisable for the group to have a layered structure. For example, a group of 12–15 major funders might develop strategy both for their own major funds and also on behalf of all others. Other funders might form another layer linked directly to individuals in the strategic layer. This might be replicated to smaller funders on a third layer. The whole group could be held together through a website that ensures that information is passed up, down and across the group.

QUESTION 19
What remit might this group have?

45. The remit could include:

- prioritising appropriate research topics
- influencing design and delivery of research
- shaping the development of research to ensure its impact
- ensuring value for money in publicly funded research
- bringing overall coherence to research spending
- coordinating some research projects that cross age phases and sectors
- coordinating the funding for linked longitudinal studies that follow individuals from schooling through training and higher education to employment
- attracting new funding from a variety of sources.
QUESTION 20
Would Research Councils be prepared to assemble a collective portfolio of educational research and development in order to assist the Forum in its task of advising on a national strategy?

No specific response.

QUESTION 21
What funding incentives might be envisaged to encourage the development of research networks to promote interdisciplinary and inter-institutional research?

46. The Agency is particularly interested in the potential of interdisciplinary and inter-institutional research. We are primarily concerned with research that relates to problems in practice and policy, and find that frequently solutions cannot be found within the confines of a single discipline. A recent example is the Agency’s research into computer-based methods of diagnostic assessment for key skills. This involves psychometric methods, software development, theories of knowledge and of learning, as well as practical experience of assessing learners. We are well aware that interdisciplinary working has profound implications for the way university-based researchers organise themselves. We are concerned to ensure that inter-institutional research includes institutions close to the worlds of policy and of practice.

47. The Agency, for example, organises a research network (the Learning and Skills Research Network, formally the Further Education Research Network, FERN) which involves university and college researchers throughout the nation organised into regional groups. Currently, these regional networks are sharing practice, developing skills and understanding; they are embarking on a first wave of centrally funded projects. We are aware of comparable initiatives by the TTA, the Scottish Further Education Unit, and higher education–further education consortia in Durham, Newcastle and East Anglia. Funding through such institutional networks could be used for:

- designing research projects
- sharing out the implementation of specific aspects of the project
- interpreting the implications of research for different learning contexts
- organising smaller-scale spin-off research that tests out major propositions in a variety of specific subject areas, learner groups or levels of qualifications
- training the researchers and practitioners
- sharing findings and their transformation into useable knowledge, action and improvement at local level.

48. Funding for such network development could be channelled through both existing university-based systems and network organisations such as those mentioned above.

49. There is a particular lack of a quantitative element in much post-16 research. Interdisciplinary teams might be developed specifically to remedy this. Funding incentives to attract under-represented skills (in statistics and econometrics, for example) through fellowships might be considered.

QUESTION 22
How might new linkages between education and health be built up?

50. In the area of post-16 education and training we find close analogies between the early work of the NHS research and development programme and the needs of the emerging learning and skills world. Given the evidence from the ESRC Teaching and Learning Research Programme about the limited impact of educational research on practice and policy to date, we recommend that, as with the NHS research and development programme, specific projects are set up initially to study the impact of research on practice and policy. By analogy with the NHS experience, these might involve such studies as:

- how labour market information is actually assimilated by education providers
- how information about learner performance is used by parents, learners and employers
- how learners make sense of information about career and higher education opportunities in making their decisions.

51. Apart from the relationship of educational research and health research, there are other areas of mutual impact. A useful example is research quoted by the Social Science Research Unit at the Institute of Education to illustrate the potential of the EPPI Centre, using interventions on sex education. This is a boundary area where health issues and educational issues are equally balanced and the interests of both sectors are involved. However, the use of random controlled trials to assess strategies is less familiar in education than in healthcare. We suspect that there is further scope for these methods in a number of educational interventions.
52. Other areas of overlap with healthcare research include:

- healthcare prevention strategies in relation to substance abuse, fitness, nutrition and eating disorders
- epidemiological approaches to the statistical likelihood of educational outcomes (for example, gaining qualifications or reaching university)
- strategies for meeting the needs for learners with learning difficulties and disabilities
- educational strategies for improving the health of elderly people (for example, oral history)
- the role of education interventions for people undergoing depressive episodes or undergoing other health problems at times of transition
- educational interventions (for example, around literacy or communications or life skills) organised within the family setting particularly where the family unit has healthcare needs
- strategies for multi-agency work on support packages for groups currently not in education or training.

**QUESTION 23**

What form might these linkages take?

53. In the post-16 world, the research and development function of the LSC might look at the origins of the NHS research and development programme. Both the LSC and NHS are required to focus on the research needs of the public service sector. To do this they need to identify the strengths and limitations of the academic research community in relation to practical problem solving. The 10 years of experience in the NHS may enable lessons to be learned by the emerging LSC.

**QUESTION 24**

What might be done to exploit available opportunities to the benefit of the UK?

54. A joint working party of NHS and educational researchers could be set up to look at possible sharing of methodology, combined impact and cross-fertilisation of research findings.

**QUESTION 25**

What steps are needed to achieve a major initiative to look at the impact that education and health have on each other?

No specific response.

55. Reviews of research training programmes and research within teacher training programmes are welcomed. We suggest that the reviews are undertaken by an organisation not directly involved in current provision of either of these. The review of research into schooling (Excellence in research in schooling. Research report RR74, Hillage et al, London, DfEE, 1998) by the Institute of Employment Studies, for example, shone a fresh light on the strengths and shortcomings of educational research. Similarly, a review of research training by an independent body might lead to more radical solutions.

**QUESTION 26**

Who would be best positioned to undertake a review of existing training programmes in research methods and the way in which research is included in the training of teachers?

56. The Agency has become concerned about research training recently. It created a further education research network (now the Learning and Skills Research Network) which focused initially on bringing together universities and colleges, through conferences, publications and seminars. It is now turning its attention to a research skill-training programme of a modular format to be integrated into the everyday continuing activities of colleges and other organisations. We suggest that the proposed review should not restrict itself to formal training programmes but should also seek out and report on the place of research in continuing professional development.
QUESTION 28
What does education need from research in terms of skills?

57. We fully agree that a wide range of research skills is required. These should indeed come from many disciplines but also from different kinds of participants in the full research process. In addition to the skills traditionally associated with research, we highlight the following:

- identifying priorities in practice and policy that are capable of research solutions
- specifying which research questions, which methods and which forms of output are most appropriate
- interpreting key messages of research
- customising research findings for specific learning contexts
- creating developmental programmes for staff, systems and organisations that exploit research findings.

58. These skills must be defined, a curriculum mapped out and partnership approaches developed for growing the skills. The Agency has begun work in this area and is currently developing a set of 20 topics of which 10 have been specified in draft form. Our current view is that, of the very wide range of skills needed for research and for development, some are specific to research, some to development, but a large number are applicable to both. The list includes a range of topics that lie outside traditional research methods training programmes. They draw more on project management traditions within colleges or business organisations.

QUESTION 29
What opportunities might advances in information and knowledge management offer educational research and development?

59. Advances in information and knowledge management are of great potential benefit to educational research and development. The Agency is currently working on the problems of marshalling information and knowledge in appropriate formats for different groups of professionals. There is an overwhelming need for secondary research that pulls together existing research findings, distils key messages from a range of projects bearing on an issue and synthesises these. Current expertise suggests that traditional paper-based review methods will not be sufficient. The difficulty is to present knowledge in concise formats that can be read by the non-specialist without removing crucial contextual information.

QUESTION 30
How could these advances be exploited?

60. Our current thinking involves the use of the worldwide web to enable enquirers to navigate paths through the knowledge and information to suit their particular needs. This will probably involve drilling down through different levels of aggregation of information (for example, from summaries through synthetic reviews to source documentation and further contact details). We envisage that technology will play a major role in this, but do not yet have evidence of how best to use it.

QUESTION 31
What examples are there of information and knowledge management schemes already in hand or planned?

61. The Agency is itself working on approaches to research synthesis and research skills training. It is also developing its Learning and Skills Research Network to bring together the higher education research community with further education, schools, training providers and the adult and community sector to implement:

- delivery of skills training
- practitioner–researcher collaboration on projects
- practitioner secondments for research
- communication of research from practitioners.

62. We are also aware of software developed by a consortium of universities and companies across the EU that enables teams of researchers, developers and practitioners to collaborate remotely on research and development and to access global literature.
This report is a response to the National Educational Research Forum’s consultation on a national research strategy. The Learning and Skills Development Agency has worked with the Forum as part of its subgroup on capacity building and welcomes the development of a high-profile national strategy on research. The Agency particularly wishes to encourage the inclusion of research in the learning and skills sector, as it has been neglected in the past. In its detailed responses to the questions posed by the NERF, the Agency concentrates on this sector and proposes initial priority be given to work-based learning – the most seriously underdeveloped research field of the sector.