



BERA-UCET Working Group on Education Research

Prospects for Education Research in Education Departments in Higher Education Institutions in the UK

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Abbreviations

AERS	Applied Educational Research Scheme
BECTA	British Educational Communications and Technology Agency
BERA	British Educational Research Association
BIS	Department for Business Innovation and Skills
CertEd	Certificate in Education
CfBT	CfBT Education Trust (founded as the Centre for British Teachers)
CPD	Continuing professional development
DCSF	Department for Children, Schools and Families (now DfE)
DELNI	Department for Employment and Learning, Northern Ireland
DfE	Department for Education
DTC	Doctoral Training Centre(s)
ESRC	Economic and Social Research Council
EC	European Commission
EU	European Union
FE	Further education
FTE	Full-time equivalent
GTCE	General Teaching Council for England
GTTR	Graduate Teacher Training Registry
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
HESA	Higher Education Statistics Agency
HE	Higher education
HEI	Higher education institution(s)
HMIE	HM Inspectorate of Education
IALEI	International Alliance of Leading Education Institutes
ITE	Initial teacher education
LLUK	Lifelong Learning UK
LTS	Learning and Teaching Scotland
MTL	Masters in Teaching and Learning
NIERF	Northern Ireland Education Research Forum
OECD	Organisation for Economic Co-operation and Development
PCET	Post-Compulsory Education and Training
PGCE	Post-Graduate Certificate in Education
PGR	Post-graduate research
PISA	Programme for International Student Assessment

PPD	Postgraduate professional development
QR	Quality-related
R&D	Research and development
RAE	Research Assessment Exercise
REF	Research Excellence Framework
REG	Research Excellence Grant
SFC	Scottish Funding Council
SFRE	Strategic Forum for Research in Education
TDA	The Training and Development Agency for Schools
TERN	Teacher Education Research Network
UCAS	Universities and Colleges Admissions Service
UCET	Universities' Council for the Education of Teachers
UoA	Unit of Assessment
WAG	Welsh Assembly Government (now Welsh Government)
WERN	Welsh Educational Research Network

Terminology note

We use the inclusive term 'education research' rather than 'educational research' to indicate that education departments in higher education institutions are involved in a range of types of research, both *on* and *for* education (see Whitty, 2006).

Section 1. Background and context

1. The English White Paper, *The Importance of Teaching*, was discussed at the February 2011 meeting of the Universities' Council for the Education of Teachers (UCET Research and Development Committee). It seemed possible that proposed changes in initial teacher education (ITE) and the continuing professional development (CPD) of teachers might threaten the viability of education departments in English higher education institutions (HEIs). The discussion broadened to cover a range of factors indicating that this may be a particularly critical time for the development of education research in the UK. An approach was therefore made to British Educational Research Association (BERA), and the two organisations agreed to establish a joint working group to investigate and report on the current state of education research and possible future scenarios. This paper reports on the initial work carried out by the joint working group.

2. Our review of the prospects for education research in the coming years focuses on education departments in UK HEIs. Most of these departments are also involved in ITE and CPD for the education workforce, and the close association between education research and the provision of teacher education in many institutions is widely acknowledged. Thus, the changes in the provision of initial and continuing teacher education, now being proposed in England, could have a significant impact on education research capacity, especially as the recent Independent Review of Teachers' Standards (2011), to which teacher training courses in England will now work, has done little to progress the notion of a research-led teaching profession.

3. These developments in England are taking place alongside a major reform of higher education funding and significant cutbacks in public expenditure, affecting providers and some of their main stakeholders. While the last of these considerations also applies to the devolved administrations, broader policy directions for higher education in Scotland, Wales and Northern Ireland are either different or less clearly developed at this time.

4. Cuts in ITE numbers have already affected Scotland, and began to impact significantly on most institutions involved in secondary teacher education in England from 2009-10. This is likely to continue over the next few years. Many departments will find it difficult to maintain the number of subjects they have taught in recent years, and some have already transferred student numbers to other institutions or handed them back to the Training and Development Agency (TDA). The cuts are likely to mean a reduction in employment opportunities within education departments, and possibly the closure or merger of some of them. Significant rationalisation has already taken place in Wales and there is pressure in that direction in Northern Ireland too.

5. As indicated above, the direction of current policy in relation to teacher education in England was prefigured in November last year in the White Paper, *The Importance of Teaching* (DfE, 2010). This recognised a continuing role for universities (including the creation of some University Training Schools), but also appeared to presage a further and significant erosion of the higher education presence in teacher education. The Government seemed to have toned down its more extreme ambitions in this respect in the discussion paper, *Training our next generation of outstanding teachers*, published in June 2011 (DfE, 2011a). However, the implementation plan published in November 2011 reiterated moves towards more school-led teacher training, but with continuing university involvement (DfE, 2011b).

6. Despite some reassurance that universities will continue to be involved in most initial training routes (including Teaching Schools as well as University Training Schools), schools will undoubtedly be encouraged to take a more central role in both initial and continuing

teacher education. It therefore remains probable that increasing amounts of funding will be routed through schools in the future. Already the new Schools Direct approach involves schools recruiting students and then directing funding to an appropriate HEI to provide the training. At present the Schools Direct student numbers are small, but the Government's espousal of this approach makes future income streams for HEIs unpredictable and potentially volatile.

7. This particular policy trend is less evident in the other UK jurisdictions. Indeed, in Scotland, the Donaldson Report supports further consolidation of universities' role in teacher education, across the continuum of career development for teachers (Donaldson, 2011). Even so, staffing cuts in Scotland – as a result of reductions in ITE student numbers – have created similar difficulties to those elsewhere. Teaching loads for those remaining have often increased as a result of a loss of efficiencies, making it more difficult, particularly for more junior staff, to find time for research.

8. *Students at the Heart of the System*, the Government's White Paper on the future of Higher Education in England (BIS, 2011), was published recently. This means we now know with some certainty what fee and student support regime will apply to the Higher Education Funding Council for England (HEFCE)-funded undergraduate courses in 2012, and the ways in which new providers and competition between providers will be encouraged. This is likely to affect different types of institutions differentially, but so far we have only limited understanding of the longer-term impact of the Government's reforms on the system as a whole. There has been speculation that, under the new fees regime, undergraduates may increasingly be attracted to vocationally oriented courses. This may have implications for recruitment to, and the future design of, non-TDA funded Education and Childhood Studies programmes in education departments.

9. Changes to the funding of taught postgraduate courses is a cause for even greater concern, not least because Masters courses are prominent in research-led departments and are often the supply line for research students. HEFCE teaching grant for taught postgraduate courses may be withdrawn or reduced for provision in HEFCE Price Groups C and/or D. These are the groups into which the majority, if not all, education-related Masters provision will fall. In contrast to the arrangements for undergraduate students, there are to be no new student support arrangements for taught postgraduates. The need for providers to cover the loss of teaching grants and other reductions in funding (e.g. capital funding), plus the need to maintain postgraduate fees in line with undergraduate fees, is likely to result in increased fees for Masters provision. Take-up may fall immediately, but is expected to fall more sharply from 2015/16 when students graduate under the new fees regime and face the prospect of meeting higher postgraduate fees, while also servicing substantially greater undergraduate debt. There is a commitment from the Department for Business Innovation and Skills (BIS) and HEFCE to monitor the impact of undergraduate fee changes on demand for and access to postgraduate study, but this does not recognise the immediate pressures facing providers over the next few years.

10. The many part-time students who are teachers are likely to be earning above the income threshold for repaying undergraduate loans, and may therefore be particularly disadvantaged. If there is little or no funding for postgraduate provision or postgraduate students within the higher education budget, the cost of teachers accessing postgraduate qualifications will have to be met largely by schools' baseline budgets, or by teachers themselves. This is at a time when teachers are experiencing falling salaries, in real terms, and increased pension contributions, and when their employers have reduced capacity to provide support from public funds. In recognition of the value of postgraduate study for teachers, the DfE has put in place a £2m 'National Scholarship Scheme'. However, this will initially be limited to work in relation to Special Educational Needs, English, Maths and Science, and is unlikely ever to produce the level of support for teachers' professional

development available under previous schemes, or that originally envisaged under the more recent government initiated Masters in Teaching and Learning (MTL) programme. Welcome as they are, such initiatives are unlikely to offset the impact of the reforms to higher education funding and student support, especially from 2015/16, even if the scheme is still in place then. There is a risk that the momentum built up in England in recent years, with regard to the development of teaching as a Masters-level profession, will fall away.

11. A loss of capacity in the system at postgraduate level, which would be difficult to rebuild, is therefore a real risk. The possibility of maintaining this capacity through increased international recruitment, where the large growth in taught Masters degree numbers has been found in recent years, may also be reduced as a result of changes in visa regulations.

12. Meanwhile, HEFCE has also been reviewing the allocation of postgraduate research student funding, probably with a view to greater selectivity. The new approach by the Economic and Social Research Council (ESRC) to doctoral training through Doctoral Training Centres (DTCs) may also have a selective effect, with a geographical imbalance of centres in England and the probability that many providers not involved in DTCs will be unable to secure access to studentships. This may be mitigated somewhat in Wales and Scotland through nationwide DTC consortia, while separate arrangements will continue to apply in Northern Ireland.

13. Core HEFCE funding for education research has already been affected by a reduction in the total amount of quality-related (QR) funding after Research Assessment Exercise (RAE) 2008. This is being exacerbated in some cases by the removal of funding for 2* activity, which is likely to impact most harshly on the newer recipients of QR funding. In Wales, a quality and size threshold for QR funding means that there will be no mainstream QR funding for the education cost centre from 2011/12.

14. Project funding for education research also seems to have been affected by policy changes and funding cuts, with particularly severe reductions in funding from government departments. Further, some of the arms-length bodies that have funded research in England in the past – such as the British Educational Communications and Technology Agency (BECTA) and the General Teaching Council for England (GTCE) – are being abolished. Even agencies that will continue to operate – such as the TDA, in its new guise as the Teaching Agency within the Department for Education – seem unlikely to fund significant amounts of research, even of the sort supported in the past. This is reflected in the fact that private sector suppliers like PricewaterhouseCoopers (PwC), as well as universities, have experienced a substantial drop in income from work of this type during the past two years.

15. Changes in ESRC grant funding may be detrimental to the development of education research. Despite concerns about its future, identified in its demographic review of future capacity, the ESRC's new strategic priorities render education almost invisible. Some people have also detected a growing preference for large-scale quantitative research over the sort of qualitative research undertaken in many education departments. More generally, the ESRC may struggle to maintain the profile of the social sciences in strong competition with the natural sciences and engineering. Similar trends are evident in the European context, with the European Commission Green Paper, *Towards a strategic framework for EU research and innovation funding*, (EC, 2011) saying very little about the social sciences generally, and virtually nothing about education research. Nevertheless, some providers seem to have identified appropriate European funding streams, and there may be more incentive to do so now that more generous UK sources are drying up.

16. CPD and knowledge transfer activities are often linked to research in education departments, but the opportunities for growth in such work in the public sector are likely to be limited by severe cuts in funding to many existing partners and prospective clients. In

England, some funding that was previously allocated to national programmes is being devolved to individual schools and federations of schools. While there may be some positive aspects of these developments, even groups of schools have relatively small budgets and building up a portfolio of such work creates huge transaction costs for HEIs and other providers. Already Capita, one of the main private sector suppliers of such services to schools and local authorities, has abandoned a planned expansion in this field. In turn, this is likely to create even more competition for such work in overseas markets.

17. It seemed to us, taking all these developments into account, that they could amount to a 'perfect storm' for education research within education departments in UK HEIs. On the other hand, we observed that this was not the first time in some of our careers that education research had seemed vulnerable, only to be followed by periods of substantial growth. We therefore decided that we needed to establish whether the situation is as perilous as we have implied here, to avoid being accused of 'crying wolf'.

18. We felt that evidence was needed on the following key issues:

- The likelihood that the threats identified above will happen;
- Whether education research is in long-term decline or merely experiencing a cyclical downturn;
- Whether education research is contracting faster than other areas of social research;
- The extent to which educational research and teacher education can be considered as inextricably linked.

19. To answer these questions, we commissioned some work from Alis Oancea at Oxford University to help us understand current developments in a broader perspective. The next section uses her study to identify changing patterns of education research over the past decade or more. It then considers changes within education departments and how these are likely to impact on their capacity to undertake research and develop research capacity. Section 3 illustrates the education research community's perceptions of the current strengths, weaknesses, opportunities and threats (SWOT) confronting our field. The SWOT analysis was constructed from evidence derived from workshops held by the review group at the BERA and UCET annual conferences in 2011 and a UCET R&D committee meeting. Section 4 looks at ways in which we might mount a convincing case for the support of education research in the future, paying particular attention to:

- How education research might benefit from the current emphasis on impact, without jeopardising 'blue-sky' research;
- How education research might achieve a higher profile in public debates about education and in so-called evidence-based policy;
- How HEIs might work together and with their partners, including schools and groups of schools, to maintain research capability and foster a research culture in the teaching profession.

Section 2. Evolution and direction of the field

2.1. Questions and aims

20. The question that shaped the data-gathering component of the review was:

What implications may recent policy decisions and proposals for the reform of education and training and of the research system, have for each of the following aspects of education research in HEI departments of education: infrastructure; funding streams; research capacity; and postgraduate provision?

21. Interest also lay in exploring any changes in the types of research undertaken, in strategies and resources for knowledge mobilisation, and in the wider landscape for education research, including partners and competitors. However, these latter aspects were not addressed systematically, as this would have required different data gathering strategies and sources from those available to us during the period of the review.

22. Below, we explore patterns in research staffing, income, funding, quality assessment, and postgraduate provision over the past 15 years. Where possible, comparisons with other social science disciplines are made.

2.2. Data

23. We undertook a review of the literature and secondary analysis of administrative databases, such as Higher Education Statistics Agency (HESA) and RAE, and financial reports, including those of HEFCE, ESRC, and DfE, to explore various aspects of education research and to build comparisons across time and with other social science disciplines. The data sources underpinning this report include:

- The HESA data on staff and research income, by cost centre (1996-2010);
- The Annual Reports (and associated statistical summaries) of the ESRC and the DfE, 1999-2011;
- HEFCE, HEFCW, SFC, DfE, DELNI and WAG online statistics and funding allocation reports;
- The RAE databases (1992, 1996, 2001 and 2008);
- The TDA ITE places allocation letters (2009-2013);
- TDA Annual Reports (2005-2011);
- GTTR Applicant Statistics (2009-2011);
- UCAS applicant data (UCAS website) (2010-2012);
- LLUK data (2007-2009);
- The BERA/UCET RAE 2008 report (Oancea *et al*, 2010).

24. These sources were complemented by information from the workshops held at the BERA and UCET conferences and a UCET R&D committee meeting, and from correspondence with key stakeholders in the HEI, public funding, and private sectors. Email requests for information were also distributed via UCET and BERA.

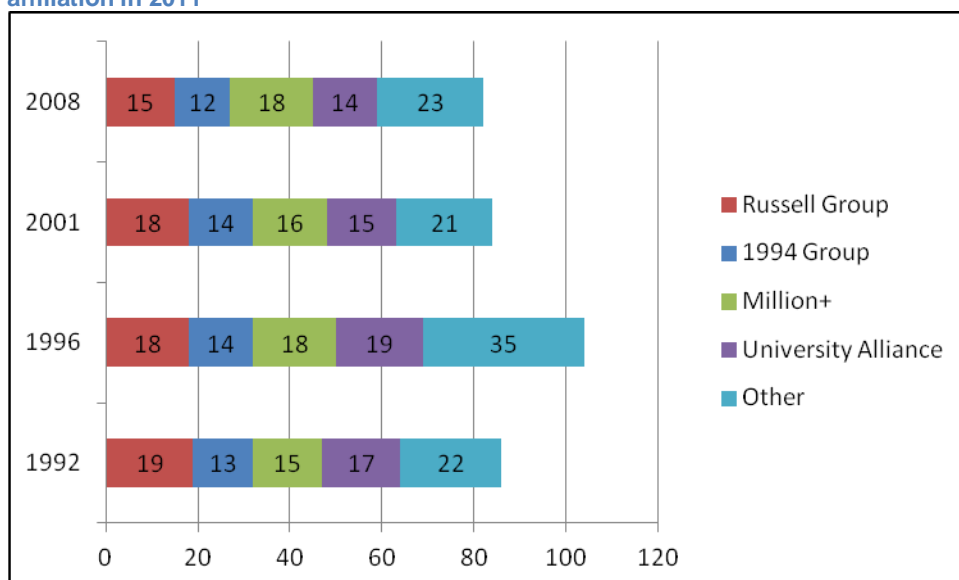
2.3. Findings

2.3.1. Infrastructure for research

25. Mapping the institutional infrastructure for higher education-based education research, and estimating the size of this education research sector, relative to other providers, is a complicated task. Departments or faculties of education are one component of the picture. Some of these institutions are more visible in their research engagement, for example, through having entered one or more RAEs. Others have either chosen not to do so, despite having lively research cultures, or have focused their efforts on other aspects of their mission. In addition, there is a great deal of education research being carried out in departments other than education – such as Sociology, Anthropology, Demography, Psychology, or Political Studies. Such research is only rarely reported in RAE and HESA statistics under the heading ‘education’. Education researchers in higher education departments other than education may have been returned to, for example, the social studies cost centre in the HESA statistics. Finally, there is a potentially large group of researchers, with an interest in educational issues, who are currently based in continuing education and academic development units within universities. Some of these researchers may have been included in RAE submissions by education departments, others may have been included in other submissions, or not submitted at all. Therefore, even before taking into account producers of education research outside the higher education sector, the size of the field is larger than the current statistics may suggest.

26. Bearing these limitations in mind, and using HESA, Funding Councils, and RAE data, we have tried to track some of the changes in the number and types of institutions within higher education that seem to have had a strong and/or developing education research component in the period since 1992. In this period, the number of institutions submitting to the four successive RAEs has fluctuated, as shown in Figure 1.

Figure 1. Distribution of institutions submitting to the past four RAEs, by institutional mission group affiliation in 2011



Note: double submissions by the same institution were counted once. Joint submissions were counted for each institution.

27. In 2009-10, 110 institutions reported staff under the ‘education’ cost centre to HESA. The figure for 2007-08 (prior to RAE 2008 submission) was the same. Of these, only 82 institutions made submissions to RAE 2008 (a similar number to 2001, although about one-fifth of the institutions submitting in 2008 were different from those submitting in 2001 – Brown, 2009, p.14). Thus, only about 75% of the institutions with full-time equivalent (FTE)

academic staff in education (by HESA cost centre) are represented in the RAE 2008 statistics. A similar proportion applies to the RAEs in 1992 and 2001 – the one exception was RAE 1996, with 104 submissions in the RAE and 108 institutions in HESA. The subsequent return to a much lower figure may have been a consequence of the disappointing outcome of RAE 1996, particularly for post-1992 institutions (for a more detailed focus on post-1992 institutions, see Gilroy and McNamara, 2009; Oancea, 2009).

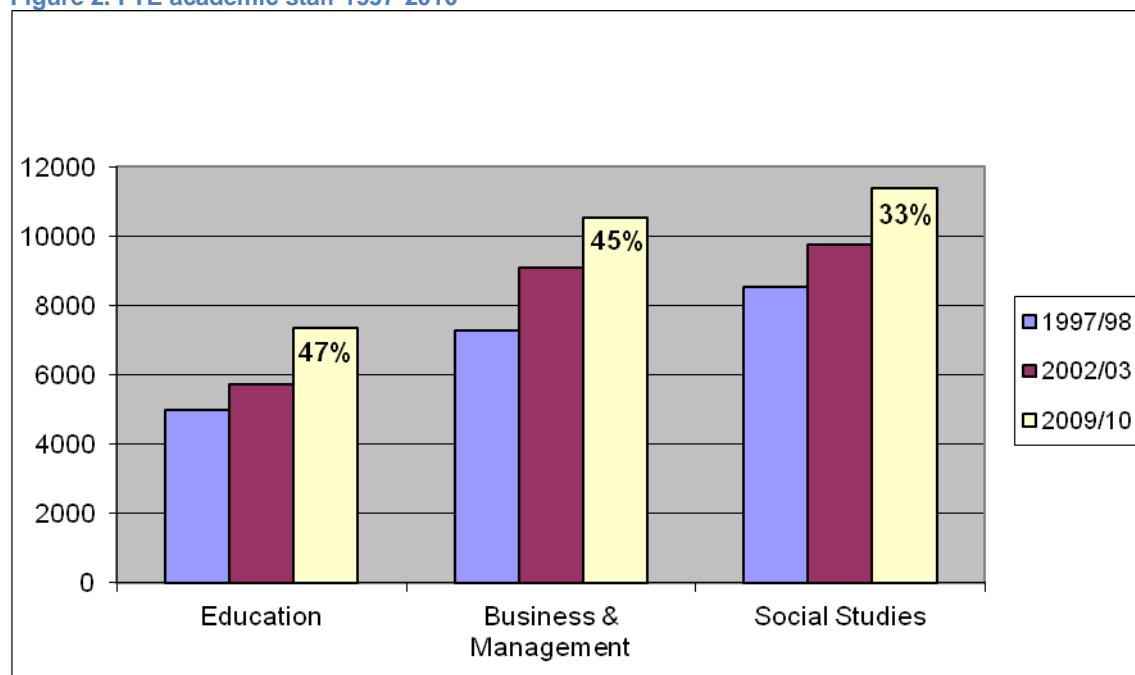
28. The full impact of the most recent research funding and governance changes on the institutional landscape for education research in the higher education sector has yet to be seen. However, the participants in the three events held in connection with this review, as well as the respondents to the 2009 review of RAE 2008 in education (Oancea, 2010), suggested that some significant institutional re-arrangement (mergers, restructuring, retrenchment) has already taken place since RAE 2008. There may well be further changes in the research landscape in the run up to Research Excellence Framework (REF) 2014, although some are likely to be driven by logics other than that of enhancing research capacity and quality.

2.3.2. Capacity

Academic staff in education departments

29. Overall, the past decade seems to offer a picture of growth in the numbers of FTE staff employed by education departments in HEIs. According to HESA FTE staff data, between 1997 and 2009 the number of staff reported by HEIs for the education cost centre grew at a somewhat faster pace than in other social sciences (see Figure 2 – the percentages on the figure indicate the percentage difference between 2009/10 and 1997/98).

Figure 2. FTE academic staff 1997-2010

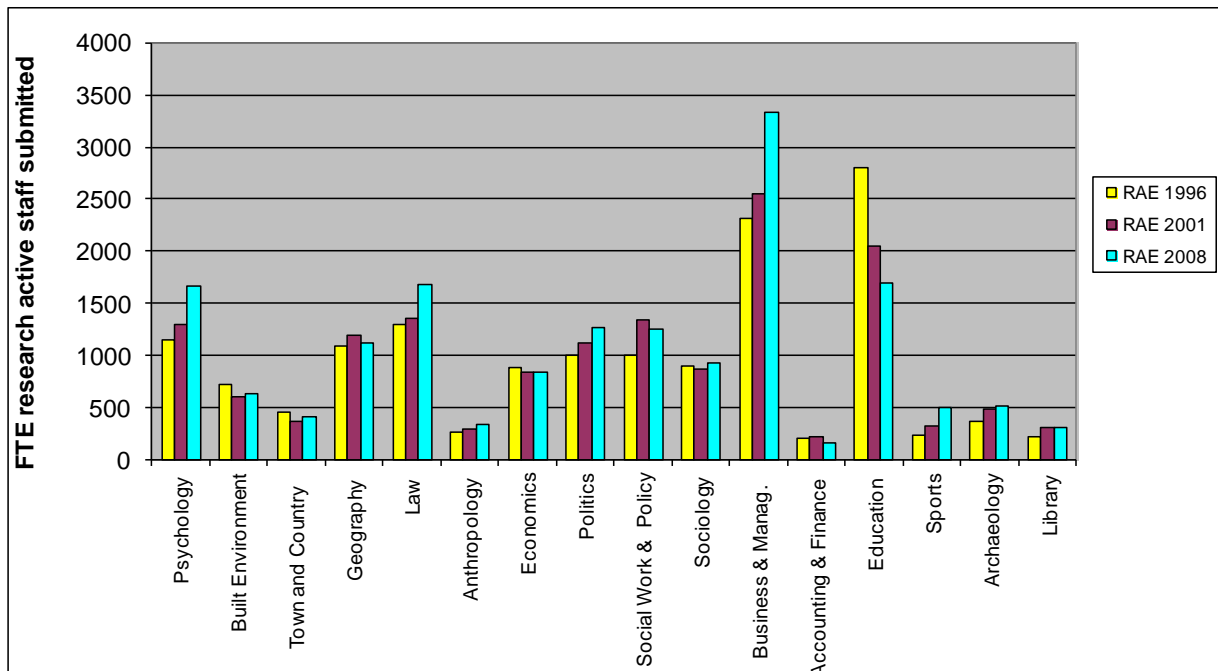


30. Of the four countries of the UK, the largest rate of growth in education FTE staff was registered in Northern Ireland (170% growth relative to a total academic load of FTE 73 in 1997/98); followed by England (53% of the 1997/98 figure of FTE 4,053); while Scotland and Wales remained relatively stable (13% and 11% growth respectively). An important part of the overall growth is accounted for by the growth in teaching-only contracts (the FTE of which increased across the four countries by two-thirds between 1997 and 2007) and research-only contracts (with similar growth, but lower numbers).

Research-active staff

31. The picture of growth in the overall numbers of FTE staff is, however, not matched by a similar trend in the numbers of staff deemed 'research-active' for RAE purposes – a situation that sets education apart from most of the other social science disciplines. Over the period covered by the past four RAEs (1992-2009), the absolute number of FTE staff submitted – that is, staff deemed research-active – decreased. The figures fell from 2,795 (which made education the largest social science discipline in terms of FTE submitted in 1992), to 1,696 in 2008 (which brought the size of FTE submitted in education well below that of Business and Management, and to a comparable level with Psychology and Law). Figure 3 indicates this decrease.

Figure 3. Total FTE research-active staff (in social studies) submitted to the RAE, 1996-2008 (all countries)



32. As Margaret Brown, chair of the education sub-panel in RAE 2008, observed:

“In relation to numbers of active researchers in Education entered in 2001 [the 2008 submission showed] a fall of roughly 15%, but since most of the drop was from the Russell and 1994 group universities, it seems likely that this is partly due to the greater degree of selectivity of staff entered, especially in English universities. In Scotland there was a 63% increase to 267 staff (and much less selectivity), in Northern Ireland (39 staff) little change, and in Wales a decrease to 41 staff (even after allowing for the fact that Cardiff submitted to Education in 2001 but not in 2008). The overall numbers of staff per submission varied from 1 to 254, with a median of 13; 30% of submissions had less than 10 researchers and 70% less than 20. Of the four largest entries, three were from Scottish universities.” (Brown, 2009, p. 14-15).

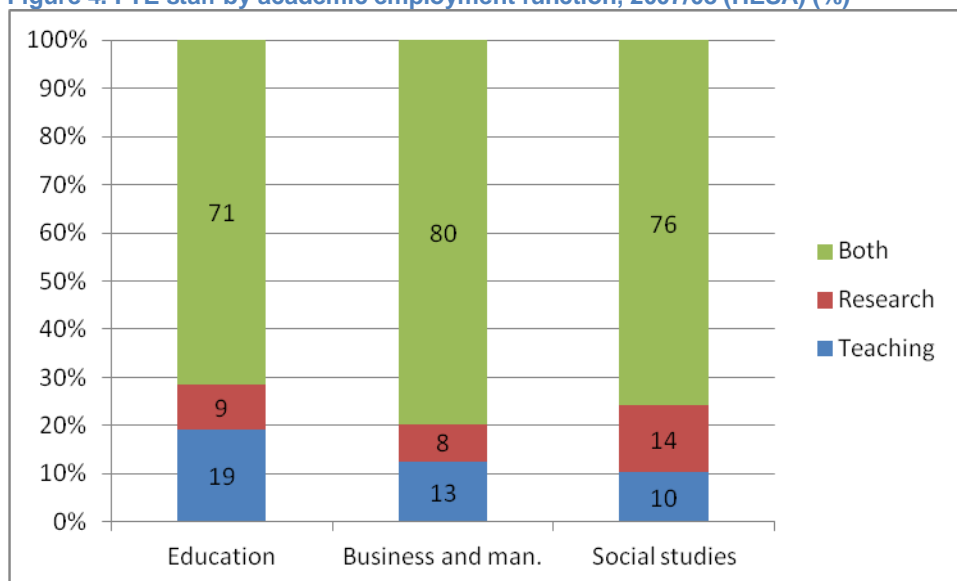
33. ‘Research-active’ staff (in RAE terms) represent a relatively small proportion of the total FTE staff in education. This may be the product of selectivity mechanisms induced by the RAE, as well as a result of patterns of contractual arrangements and workload distribution that may be specific to disciplines, such as education, which have heavy involvement in professional training. However, Figure 3 seems to show a reduction in research-active staff in education that is not evident in all professional disciplines. Indeed, these patterns and mechanisms may not reflect the extent of actual engagement in research across total

numbers of staff in education departments. It would be a matter of concern if they did, given the professional commitment in teacher education departments to sustaining a strong link between teaching and research (as reported by participants in our review and in the RAE 2008 review, Oancea, 2010). The total FTE staff submitted to RAE 2008 was 1,696. This is the equivalent of 31% of the total FTE staff in HESA records for 2007/08 who had 'research' (on its own or alongside teaching) as part of their academic employment function (FTE 5457.2). Thus, any conclusions about education research drawn on the basis of RAE submissions, only reflect about one third – albeit the more research-intensive third – of the potential capacity in the country. Even after taking out of the HESA figure the FTE of those who are on fixed-term contracts (although many of them would have still been eligible for RAE submission), the proportion is 37.17%. The comparable proportions in Business and Management studies are 40.17%, respectively 46%.

34. Among those institutions that did submit to the RAE, intra-institutional selectivity was evident: the total number of FTE staff submitted to RAE 2008 as being research-active, was about 27% of the FTE academic staff figure that the submitting institutions had reported to HESA in 2007/08. The difference was even sharper in institutions with very large teacher education programmes. Of the four countries of the UK, Wales had the smallest proportion (13%) of FTE staff submitted to the RAE, out of the total FTE reported to HESA in 2007/08; Scotland submitted the highest proportion (39%). Increased selectivity at supra-institutional level was also indicated in Figure 1, which showed a shrinking proportion of newer universities among the institutions submitting to successive education RAEs, since the submission 'boom' of 1996, which was followed by disappointing financial outcomes for institutions rated 3b and below, many of which were post-1992 universities. This observation suggests that a large number of the FTE staff who were not submitted in the RAE and/or not supported by QR funding may be located within post-1992 newer universities.

35. The relatively low proportion of FTE staff submitted to the RAE, compared to the number of FTE staff reported to the HESA education cost centre, may also be linked with employment patterns in the field of education and their potential bearing on research productivity. For example, education is a field with a relatively high proportion of teaching-only staff, compared to other social science disciplines. If staff on teaching-only contracts (including fixed-term) are included in the FTE HESA figure, the proportions of submissions to the RAE 2008 drops to 25.16% for education and 35.13% for Business and Management. The differential drop is accounted for by the higher proportion of teaching-only staff in 2007/08 (19% of all teaching and research FTE staff) in education, compared to Business (12.56%) and to other social studies (10.29%). Figure 4 indicates the proportion of FTE staff by academic function in education and two other cost centres in 2007/08 (the HESA reporting period that included the RAE 2008 census date, which was 31 October 2007). Although HESA data are not available on how many staff on teaching-only contracts are teacher educators, anecdotal evidence suggests that this number is high.

Figure 4. FTE staff by academic employment function, 2007/08 (HESA) (%)



36. The data represented in Figure 4, coupled with qualitative evidence from the workshops carried out as part of this review, suggest the possibility of a growing bifurcation between teacher education and education research. Respondents to the earlier BERA/UCET review of RAE 2008 explicitly linked their perception of such a growing divide to what they described as the drive for increased research selectivity, within their institutions and nationally (Oancea, 2010). Profiling teacher education after RAE 2001, Dadds and Kynch (2003) estimated that 80% of teachers were trained in education departments with no QR research funding. No data are available regarding the current proportion of dedicated teacher educators among staff designated as research-active in education departments. However, based on the number of teaching-only contracts in education departments, one can surmise that this proportion may be even smaller. Yet, if teacher educators are not research-active, then it is possible that teacher education may not be valued sufficiently to be sustained as a core activity in at least some HEIs.

Building and sustaining research capacity

37. Recent national initiatives aimed at building research capacity and expertise across the range of disciplines, included the initial allocation of £45 million over three years (2006/09) by HEFCE, to support 'research-informed teaching' environments in less research-intensive institutions. This was done through the Teaching Quality Enhancement Funding. In 2009/10 the funding distributed by HEFCE for research-informed teaching, as part of the targeted allocation for 'teaching enhancement and student success', was £10m (down from £15m in 2007/08 and 2008/09). In 2010/11 this component amounted to £10.1m, across the entire higher education sector. Detailed figures about the proportion of this investment that may have been allocated to supporting research-informed teacher education are not available.

38. The largest investment in educational research over the past decade in the UK was the Teaching and Learning Research Programme (TLRP). The total funding for the TLRP, over its entire duration was £43m (including a technology enhanced learning extension phase until 2012), almost two thirds of which came from HEFCE. The core programme was managed by the ESRC between 1999 and 2009. Research capacity building and engagement with research users were explicit aims of the TLRP. Between 2001 and 2009, thus, almost £1m – about £120,000 per annum – was invested in capacity building through the TLRP. From 2002 to 2005, the TLRP supported a Research Capacity Building Network (with a budget of £0.5m) for education, based at Cardiff University, with the aim of developing research training provision for education. The TLRP capacity building investment continued

after the end of the funded RCBN with a range of embedded capacity building activities and the development of wide-ranging virtual resources in 2005-2008 (see Fowler and Procter, 2008; Murray and Pollard, 2011). The second TLRP capacity building award, made through the Director's Award, was around £0.48m.

39. The Strategic Forum for Research in Education (2008-10, with funding from the DfE, ESRC, CfBT Education Trust and BERA) built on these initiatives to identify challenges and opportunities for capacity building and sustainability in education research post-2010 (Pollard and Oancea, 2010). There have also been a limited number of research capacity building projects based on the 'embedded social practices' model (Baron, 2005) in education departments across the UK. These include the Teacher Education Research Network (TERN) (2008-09) in Northwest England (Murray et al, 2011) and the Welsh Educational Research Network (WERN) (2007-09) (Davies and Salisbury, 2009). Initial funding for the projects came variously from the ESRC/TLRP, Higher Education Funding Councils, and government departments of education. The TLRP, as well as the programmes named above, has now ended (apart from the TEL extension to the TLRP, due for completion in 2012). In Northern Ireland, the Education Research Forum (NIERF, 2008-10) was a governmental initiative with no dedicated funding (Leitch, 2009). NIERF is currently dormant, but there are other potentially interesting developments on a north-south basis, such as the Institute for Educational Research in Ireland, launched in June 2010 and based at Dublin City University.

40. In Scotland, the Applied Educational Research Scheme (AERS) (2004-09) received a total of £1m from the Scottish Funding Council, with a particular emphasis on capacity building, and another £1m from Scottish Executive, with an emphasis on research feeding into the national priorities for education. The AERS consisted of four networks. Three of them were intended to carry out research in particular substantive areas. The fourth was a research capacity building network, with about £400k dedicated funding over the duration of the programme. Its aims included the development of formal and non-formal research training opportunities and of virtual resources. The funding of capacity building activities was, however, not restricted to this network, as each of the substantive networks were expected to support capacity building in a more distributed fashion, again through the 'social practices' model (Christie and Menter, 2009). The Fellowships created through the AERS levered in resourcing from Scottish HEIs, through the allocation of staff time. It was estimated that the in-kind investment by Scottish HEIs at least doubled the amount of funding provided by SFC and the Scottish Executive over the five years of AERS funding (Taylor et al, 2007). There has been no further central investment in capacity building for education research in Scotland since the end of the AERS.

41. Another source of support for capacity building in education has been ESCalate (2003-09), an Education Subject Centre of the Higher Education Academy, which produced resources, organised conferences, and funded small-scale research and development projects with a focus on teaching and learning in education studies, including initial teacher education (McNamara, Brundrett and Webb, 2008). Although there have been no specifically earmarked awards for capacity building in ESCalate, capacity building was a designated area of activity within its overall portfolio, and much of ESCalate's activity could be classified in this way. Recent ESCalate budgets have been in the order of £0.4m pa (now reduced to about £100k as it winds down); this funding is coming to an end and opportunities for future provision are still to be identified. HEA resources are still available through their central provision but it may be more difficult to develop customised activities in education studies to a level comparable with that of the recent years.

42. HEI education departments face a number of further, discipline-specific challenges in relation to capacity building and future sustainability. One is the age demographic profile of the education workforce. The ESRC demographic review (Mills et al, 2006) found that, in

2003/04, nearly 70% of staff were over the age of 45, and 50% were over 50. This is likely to be high, compared with other social science disciplines, because of the significant proportion of the education workforce involved in teacher education; and because most are expected to have Qualified Teacher Status, and they enter higher education employment mid-career. Their relatively late age of entry into higher education employment means these staff members have a limited time to establish their higher education-based teacher education career and to develop their research profile.

43. The relatively lower level of remuneration in the HEI sector than in the school sector may make it difficult for HEI teacher education departments to attract appropriately experienced staff from the school sector. Most of these school staff would be senior or middle-level leaders, likely to be earning more than the top of the HEI lecturer scale. This issue is accentuated in many HEIs because initial appointments and promotion criteria at senior lecturer level require staff to have completed doctorates and have research experience.

44. Making the transition between school and HEI teacher education cultures is also a challenge in terms of developing the necessary range of knowledge and skills, particularly in respect of research and scholarly activity. Prioritising the time to do this is difficult, not least because the teacher training year is longer than that of other programmes, and the workload is heavy. In research-intensive universities particularly, this can make non research-active potential recruits (from schools and further education) less attractive to employ and more difficult to assimilate into the academic culture. Conversely, teacher training may be less attractive to aspirant research-active academics on other education programmes, because conditions of work may not be conducive to the development of their research profile (McNamara et al., 2008).

Summary

45. Data on staffing suggest that there is strong selectivity in RAE submissions, and that there is increasing separation between teaching and research contracts across HEI education departments. This situation affects the volume, stability and distribution of research capacity across the UK. Over the past decade there have been several programmes and funding schemes aimed at building capacity in education research. These schemes have now ended and there is no dedicated programme in the UK for supporting research capacity in education. In this context, any gains from prior capacity building programmes at national level (such as the TLRP and Research Capacity Building Network, and the 'social practices' models of TERN, WERN and AERS projects) may prove hard to sustain. In short, there seems little immediate prospect of reversing an apparently significant decline in the numbers of research-active staff in education departments.

2.3.3. Funding streams: Research funding

Quality-related funding (HEFCE, HEFCW, SFC, DELNI)

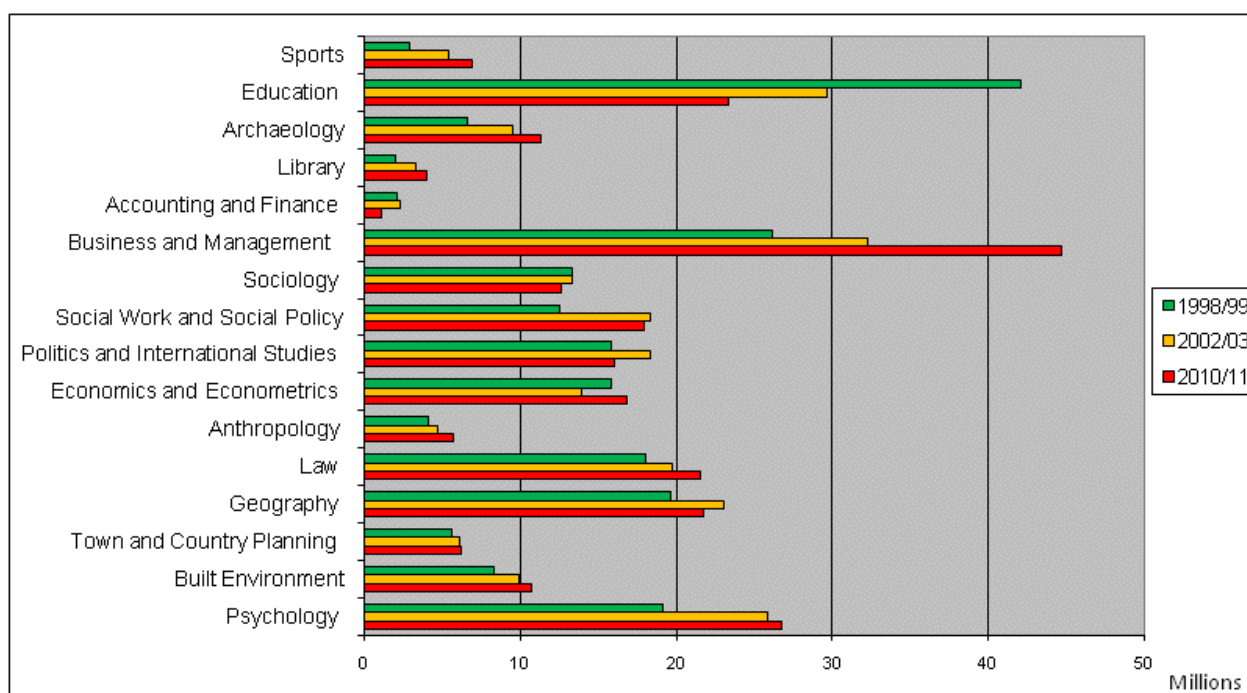
46. The reduction in the number of staff submitted to successive education RAEs since 1996 was accompanied by an even more marked drop in the QR funding allocated to education as a field over the past three RAEs. As indicated above, between 1996 and 2008 there was a drop of 39% in the total FTE staff submitted to the education subpanel, from 2,795 (RAE 1996) to 1,696 to (RAE 2008). This decrease happened against a background of overall growth (also described earlier) in the total FTE reported by institutions to HESA under the education cost centre (47% growth between 1997/8 and 2009/10).

47. At the same time, in England since RAE 1996, there has been a real-terms decrease of about 45% in QR funding allocated on the basis of assessments of submissions to the education sub-panel (Figure 5). This makes education one of the two social science disciplines experiencing continuous and marked decrease in total QR funding allocated

since 1996. (The second is Accounting and Finance, which has a much lower volume but a 49% drop.) In 2009/10, the 25 education departments that had received funding after RAE 2001, and continued to do so after RAE 2008, experienced a collective loss of £6.8 million – a loss that was not proportionate in scale with the reduction in the number of staff submitted as a result of increased selectivity within departments:

“This [loss] inevitably affects the ability of such departments to underpin and invest in their research bases; given that these are the largest departments with the greatest mass of researchers, this may pose risks to the future health of the research base of the discipline” (Hazlehurst, Morris and Wiliam, in Oancea et al, 2010, p. 56).

Figure 5. HEFCE QR allocations by social science discipline, 1998-2012 (real terms, 2010/11 as reference)



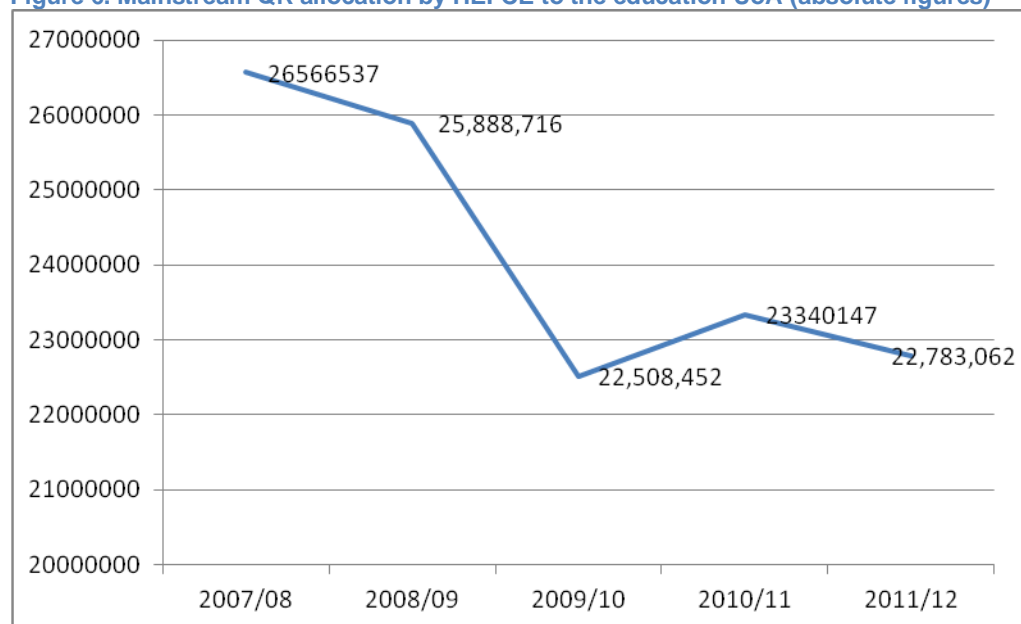
Source: HEFCE

Note: 1998/99 figures include Northern Ireland

48. This drop can be explained by several factors. It is, in part, due to the decrease in the numbers of staff submitted (thus increasing *selectivity*); and due to either lower *quality* of education submissions, compared to other social science disciplines, or more severe assessments by the education sub-panel and/or its main panel. It can further partly be explained by changes in the allocation formulae for QR funding, leading to increased *concentration* of funding (see Oancea, 2010, 2007).

49. After RAE 2008, the balance of selectivity, quality assessment, and concentration of funding has played out differently across the countries of the UK. In England there was a lower but more distributed funding outcome immediately after RAE 2008 than in the previous years (Figure 6). However, the allocation of QR funding among the 65 eligible HEIs is again becoming more concentrated, as the weighting for 2* research was reduced from 2010/11, leading to a drop in the level of funding of departments that had been new to QR funding in 2009/10.

Figure 6. Mainstream QR allocation by HEFCE to the education UoA (absolute figures)

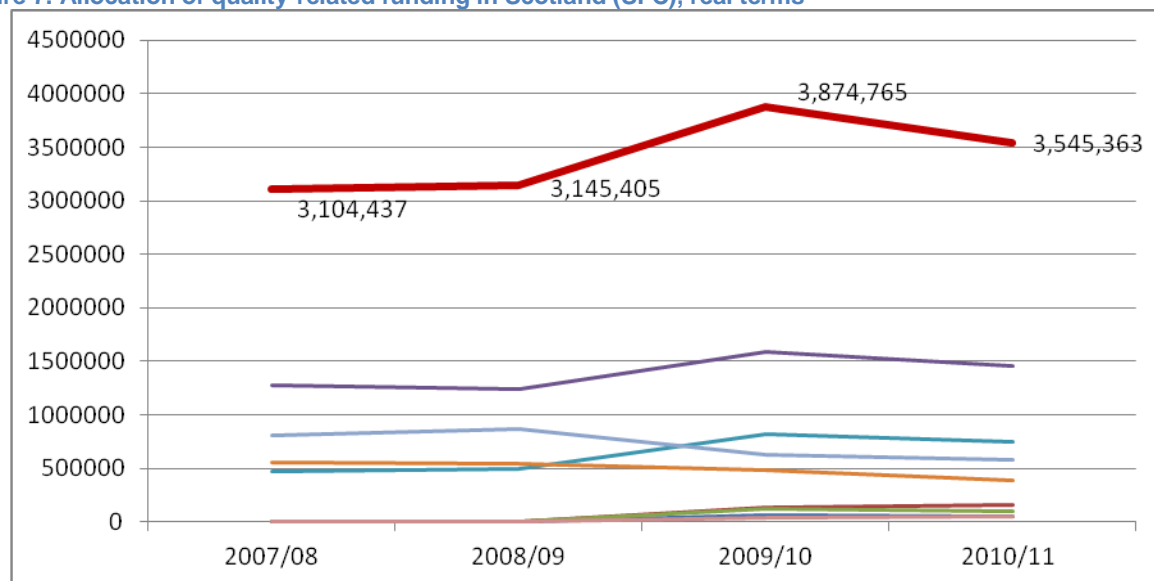


Source: HEFCE QR allocation data

50. In Wales, from 2011/12, HEFCW will only fund 3* and 4* research. Together with the introduction of a 'sustainability' threshold (currently 3.5) for QR funding – based on a single score combining volume and quality figures¹ – this decision means that there will be no QR funding for education research departments in Wales from 2011/12. This compares with £223,311 distributed among five institutions in 2010/11.² Other research areas are facing similar cuts, including: Development Studies (social sciences); Applied Mathematics (sciences); and Philosophy, Linguistics, Italian, and History of Art (humanities).

51. In contrast, in Scotland, the past five years have seen an overall increase of 14.2% in QR funding (now REG – Research Excellence Grant). In real terms (with 2010/11 as the reference year), the growth has been from £2,886,846, distributed among four institutions in 2007/08, to £3,545,362, distributed among eight institutions in 2011/12 (Figure 7). The level of funding peaked immediately after RAE 2008, when the funding model was revised. At the level of individual institutions, however, fluctuations in funding over this period had mixed impacts, despite the overall increase and despite some transitional arrangements to support particular HEIs in coping with a heavy drop in REG income in 2009/10. Increased concentration of funding from 2011/12 (through the removal of funding for 1* research) will lead to further changes.

Figure 7. Allocation of quality-related funding in Scotland (SFC), real terms



Note: The red line indicates the total QR/REG funding allocated to education; the coloured thin lines indicate the levels of funding for each eligible institution.

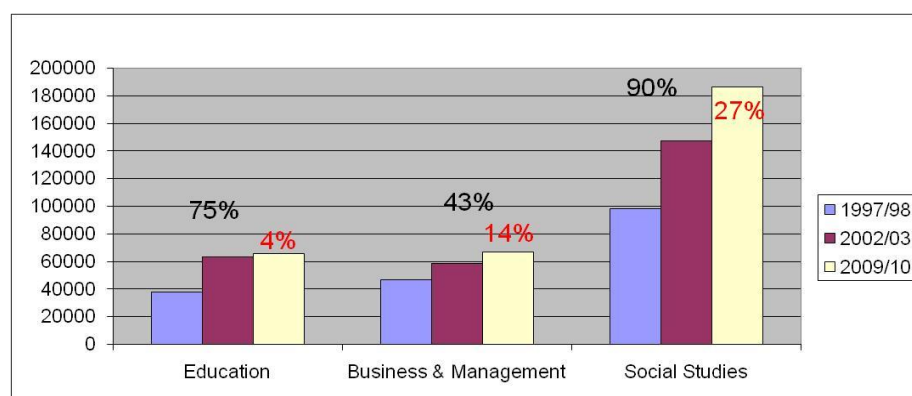
52. For Northern Ireland, Hazlehurst, Morris and William (in Oancea, 2010) estimated a 5% drop between the 2008/09 allocation to two institutions and the 2009/10 allocation to three institutions (to a total of £657,564 in 2009/10).

External research income

Overall distribution

53. The project costs of research in education departments are covered – partly or totally – by income from research councils, charities, government and industry. In real terms, the total research income reported by HEIs under the HESA education cost group (which includes Sports and Continuing Education) rose remarkably between 1997 and 2001, although at a slower pace than the other social sciences (see Oancea, 2009). However, (unlike other social studies) it plateaued in the period post-RAE 2001 (Figure 8). More detailed figures for education could not be analysed over the time frame of this review. The large investment by HEFCE and other funders, via the TLRP between 1999 and 2009, has now ended (except the 2009-11 Technology Enhanced Learning extension), and the impact of this may become more evident over time.

Figure 8. Total research income reported to HESA, by cost group (£000, real terms 2010/11)

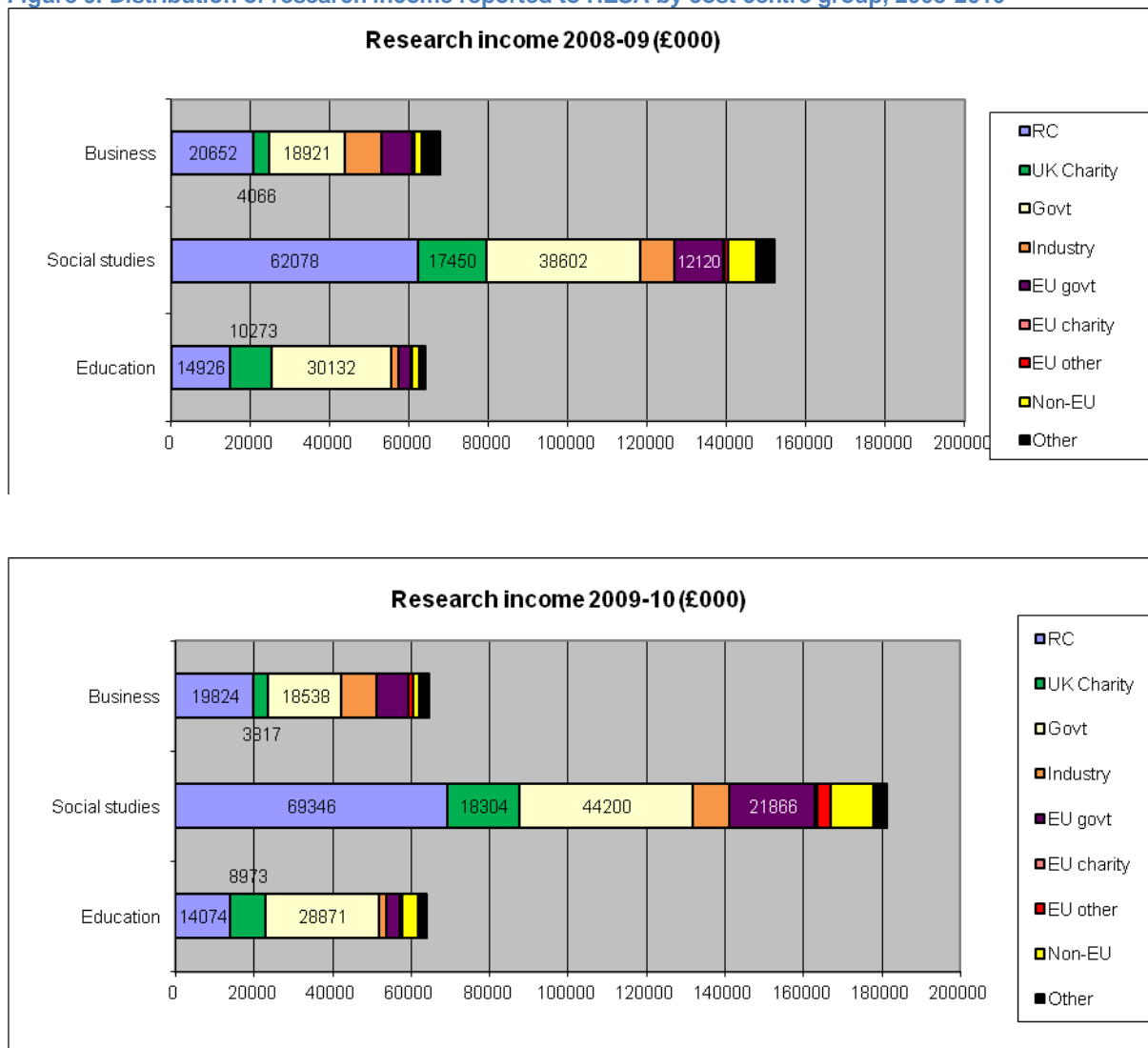


Note: black labels indicate % (of 1997) growth 1997-2010; red labels: % growth 2002-2010

54. The range and distribution of the sources of research funding reported to HESA varied over this period. The most important sources of funding for education research are: UK

Government funding (on which education research has been highly dependent, making it also very vulnerable to fluctuations); research council and charities funding; some EU and non-EU sources of funding; and a small proportion of funding from UK industry. In recent years, the disciplines included in the education cost centre group (Education, Continuing Education, and Sports Science) seem to have fallen behind other social studies, both in the rate of growth of research council, charity and government funding (negative growth, in the case of education), and in the ability to attract EU funding (Figure 9). The relatively low level of EU funding in education, compared with other social science disciplines, may be seen as a weakness of income mechanisms in education. However, it can also be seen as a possible area of opportunity for future funding, provided that there is ongoing recognition of the contribution that education research can make to most areas of priority set by the European Commission for the social sciences (an argument that also stands for the priorities set by the relevant UK research councils). Other sources of income, such as that from consultancy and for knowledge exchange activities, are notoriously difficult to estimate, although data are now being collected more systematically than in the past.

Figure 9. Distribution of research income reported to HESA by cost centre group, 2008-2010



Government department and agency funding

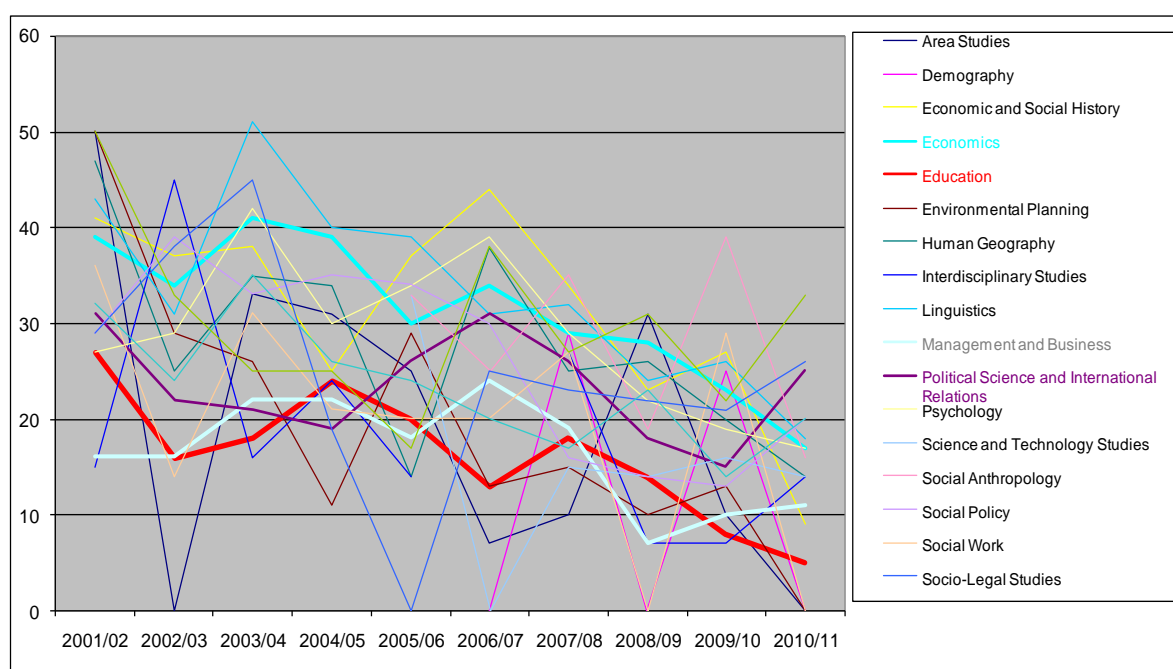
55. Among the sources of funding for education research, the most significant has traditionally been UK Government funding; this source is also the one where accurate data are most difficult to compile. This funding includes that from central government (including, in England, the DfE), from local government, and from governmental agencies. The response by DfE and BIS to a Freedom of Information request in February 2011 (Tanner, 2011) indicated a cut in DfE research spending due to the cancellation of 13 projects between May and December 2010 (totalling £7,497,100). The projects cancelled included an evaluation of academies (£400k), the families' survey for the measurement of Disabled Children's Services Indicator (£2.8m), and the national TELLUS survey that gathers children and young people's views on their life, their school and their local area (£1.3m). Seven of the 13 projects cancelled were evaluations. Another 14 projects were cancelled before a contractor for the full research design had been appointed (Tanner, 2011). Further anecdotal evidence of reduction in government funding for research was provided to the review by colleagues who had experienced a 'drying out' of funding for long-term collaborations with local government.

56. Further, still undocumented, threats to education research in general, including HEI-based research, have been posed by the closure of a number of governmental agencies which had either played a role in commissioning research from HEI departments, or had been long-term partners in the dissemination and mediation of education research. These agencies included BECTA, the GTCE and the Qualifications and Curriculum Development Agency. Some English education departments have been particularly dependent on such bodies for funding their research activities, especially those with little or no QR income or research council grant income. We have so far been unable to estimate the size of the overall effect on research income to education departments arising from the closure and transfer of functions of these agencies.

ESRC funding

57. Over the entire period 2001-2011, education accounted for 9% of the total applications processed by the ESRC – ranking fourth among the social science disciplines applying. It received 6% of the total number of awards – ranking equal fifth. Figure 10 indicates the success rates for the various social science disciplines, since 2001. It suggests a relatively modest rate for education, as well as a continuous decrease in success rates, alongside other disciplines, as competition for limited resources tightened. The largest shares of both applications and awards belonged to Psychology (24% and 27% respectively), Sociology (11% and 11%) and Economics (9% and 12%), followed by Education (9% and 6%) and Politics (7% and 7%). Of course the average value of an award may vary across disciplines, while some education-related awards may have been made to other social science departments.

Figure 10. ESRC success rates, 2001-2011, by social science discipline



Funding prospects

58. HESA and RAE income figures are backwards-looking and provide limited insight into the current and medium-term situation across the sector. It is difficult to estimate the current level of income in HEI education departments, and impossible to predict the likely impact of current and projected income on future strategic decisions in these institutions. UCET circulated among research directors in its member institutions a request for information about any variation in external research income between 2009/10 and 2010/11. Thirteen departments provided comparable figures in response to this request (Table 1). Overall, the responses indicated an average drop in income of about one-third from that in 2009/10. Some departments reported that they had projected even larger drops for the financial year 2011/12. The number of HEI respondents is too small to be able to generalize across the field of education research, but it was still a useful exercise, given that a diverse range of institutions responded, with a widely spread range of variation. It is important to note that the reported variation in total income would not necessarily be congruent with that in the level of overheads; the two elements of variation would impact differently upon financial planning decisions in departments. Some departments experienced lower income in 2011/12 than in 2009/10 but were able to alleviate the problem through higher overheads; for others, the drop in income was accompanied by a serious drop in overheads.

Table 1. Reported drop in external research income, by interest group, 2009/10-2010/11

Interest group	No. of institutions	Average variation 2009/10-2010/11
Russell	4	-24%
1994	3	+8% (but obscures a large drop for the member with the heaviest involvement in education research)
Million+	3	-22%
Non-affiliated	3	-77%
Total/avg total	13	-29%

59. It should be noted that an even larger reduction in income was reported by one private provider active in the field, so it seems likely that the reduction is an absolute one rather than the result of new providers winning research contracts at the expense of HEIs.

2.3.4. Funding streams: Teacher education

Initial teacher education

60. A trend toward increasing divergence of policy-making in relation to teacher education has emerged across the four home nations since the mid-1990s, but particularly since the devolution of executive power to Wales and legislative power to the Scottish Parliament and Northern Ireland Assembly in 1999 (although Scotland, in particular, has always maintained different educational traditions). In England there are three significant training routes into teaching: undergraduate (three or four years), postgraduate (one year), and employment-based (mainly one year postgraduate). Each has flexible and part-time options. For the primary sector in 2009-10, undergraduate and postgraduate courses produced 37% and 63%, respectively, of teachers, with 12% being trained through employment-based routes. In the secondary sector, the postgraduate training route is dominant, with a relatively insignificant number on undergraduate courses. Three-quarters of secondary teachers are trained on traditional (HEI-based) postgraduate courses, but in the past decade the employment-based route has grown so that it now trains around 20% of new secondary entrants. Since 2003 this route has been augmented by Teach First, a very small (around 1.5% in 2009-10) but high profile programme, which the Coalition Government has committed to doubling in size in the lifetime of the current parliament. In Scotland and Northern Ireland teacher training remains exclusively within traditional HEI-based undergraduate and postgraduate routes, whereas in Wales there is a small 'alternative' employment-based route (characteristically less than 5%). In both Wales and Northern Ireland the Open University operates a small flexible route.

61. The last few years have seen significant cuts in teacher training in all four home nations. In Wales, a programme of reorganization, review (Furlong et al, 2006) and reduction in ITE numbers began in 2004-05. It was completed in 2010-11, when there were 1,800 first-year enrolments into HEI-based courses, plus a small number on flexible (with the Open University) and alternative routes (WAG, 2011). The scale of the cuts over the five years amounted to around 20%.

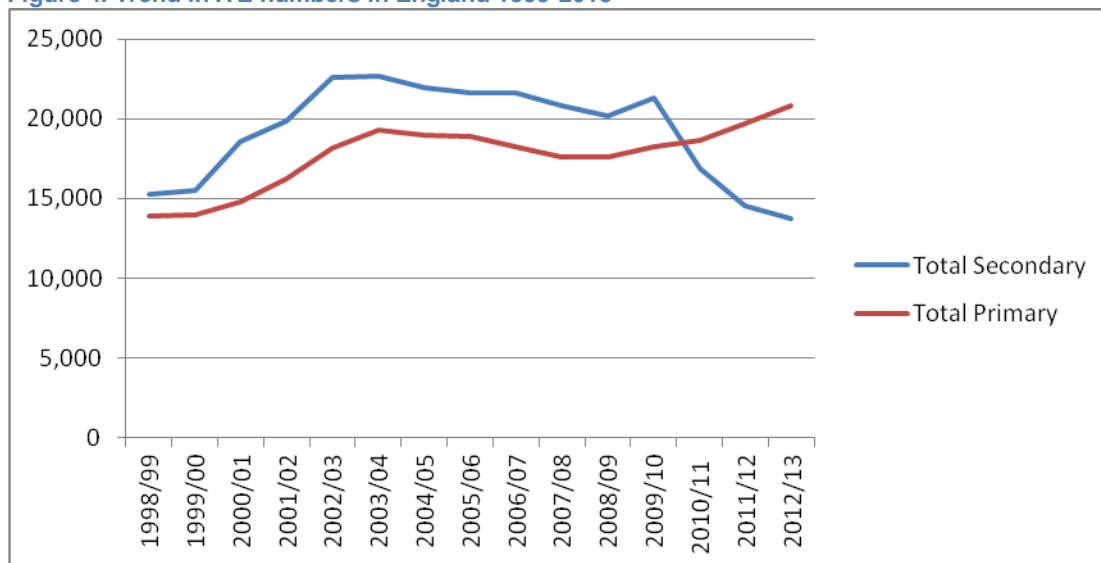
62. In Northern Ireland, intake targets for HEIs in 2010-11 were 663, including a small number on flexible routes with the Open University. Again the sector had experienced significant reductions between 2005-06 and 2009-10, when the total number of students enrolled on initial teacher training courses decreased by 32%, to 1,365, while final year graduates decreased by 23% to 625 (www.delni.gov.uk/statsandresearch.htm).

63. In Scotland, a period of reorganisation of ITE commenced with a significant reduction in intake targets in 2010-11, and the commissioning of a review of teacher education (Donaldson, 2011). Overall allocations in 2010-11 dropped to 2,307, a 40% reduction on the 2009-10 figure. The cuts were greatest in the primary routes, where undergraduate numbers dropped by 42% and postgraduate by 70%. In the secondary sector, postgraduate numbers dropped by 11% and the undergraduate numbers remained unchanged (SFC, 2010).

64. Figure 11 maps recruitment into teacher training in England since 1999. This was the beginning of the most serious teacher supply crisis of recent years, which augured a rapid increase in training numbers (30% in primary and 50% in secondary) leading to a high of 42,000 trainees overall in 2003-04. The supply crisis, generated by rising school rolls, low teacher retention and falling recruitment, was exacerbated when the Government introduced tuition fees for undergraduates in HEIs in 1998. The crisis forced the Government to begin offering training bursaries and other 'golden handshake' incentives, differentiated and targeted according to demand, to postgraduate trainees in England in 2002. The changes in intake allocations since 2007 have largely been as a result of demographic changes that have impacted differentially across the sectors. Primary training numbers, after a measured decline in the mid-00s due to a fall in birth rate, have gradually increased because of an upward revision of the population growth. After an initial measured decline in secondary

training places, a steep reduction has seen numbers drop 35% overall since 2009/10; with cuts of 20% in 2010/11, a further 14% in 2011/12 and a further 6% anticipated in 2012/13.

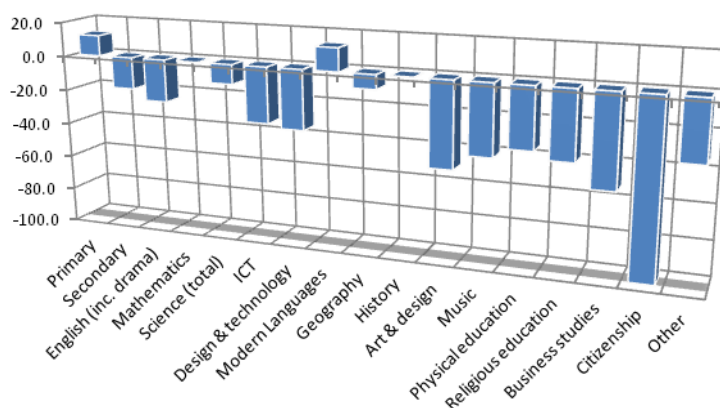
Figure 4. Trend in ITE numbers in England 1999-2013



Source: 2000/01 to 2009/10 (DfE Workforce Statistics) and 2010/11 to 2012/13 (DfE allocation numbers)

65. The impact of the secondary cuts on providers in England has been exacerbated because, rather than being consistent across the curriculum, they have been concentrated in non-STEM (science, technology and mathematics) subjects. Figure 12 shows that the most severe cuts have been in Citizenship (100%), Business Studies (52%), Art and Design (49%), Music (40%) and Religious Education (39%). This level of reduction, together with recruitment problems as a result of cuts in bursaries or shortages in supply, has left some courses vulnerable, leading to some rationalisation of subject provision between HEIs.

Figure 5. Percentage difference in allocation disaggregated by subject between 2010/11 and 2012/13



66. Furthermore, the TDA has recently indicated that, from 2013/14, they will only allocate places in small cohorts if they are being delivered through a school-led programme, and that they will work with providers over the coming months on determining those places which are school-led. It is not entirely clear what this means, but it seems to have worrying implications for the survival of some subject specialisms in HEIs.

67. The degree of flux in the teacher supply chain has also caused uncertainty in the sector in the last few years, as can be seen from the applications received by the Graduate

Teacher Training Registry (GTTR) for postgraduate teacher training in England, Scotland and Wales. The data for the 2011 entry, compared to 2010, (see Table 2) show considerable variability, perhaps surprising given the endemic and persistent economic crisis. The GTTR recruitment round in 2008-09, immediately after the catastrophic market collapse in September 2008, for example, witnessed an increase of 22% in applicants, disproportionately of young men. (GTTR, 2011, see also Howson and McNamara, in press). Effective workforce planning has been made more complex because of the many opposing tendencies operating currently in the UK teacher labour market, which is driven by “a mixture of free-market capitalism and state workforce planning, interlaced with ideological and political interventions” (Howson and McNamara, in press). Over the last few years, reasons for the decrease in the numbers of applications have variously included: severe cuts in intake allocations suggesting over-supply of primary/secondary teachers and presaging low employability prospects; anticipation of a reduction in teacher pensions; and the continued erosion of training bursaries. This was exacerbated by reduced demand in the labour market for newly qualified teachers as a result of: reluctance on the part of schools to recruit once the 2010 budget cuts ‘kicked in’; staff unwillingness to move/go part time because of the economic uncertainties; and the return of significant numbers of out-of-service teachers.

Table 2. Percentage change in applications and acceptances to GTTR for 2011 entry compared to 2010 entry

		England	Scotland	Wales
Primary	Applications	+4.4%	-17.2	-12.9%
	Acceptances	+7.3%	-3.7%	+3.6%
Secondary	Applications	-12.6%	-16.0	-13.4%
	Acceptances	-18%	0	-6.5%

Source: GTTR Application Statistics, October 2011. Online at www.gttr.ac.uk/providers/statistics/2011stats.

68. The teacher labour market in England will stray into totally uncharted territory in 2012 with the implementation of a new approach to HEI funding (building on the Browne Review, Browne, 2010), triggering an average nearly three-fold increase in undergraduate tuition fees. Postgraduate teacher training was not mentioned in the Review but, in line with other postgraduate courses, it was assumed that from 2012-13 all state funding for postgraduate training would be withdrawn. Universities in England traditionally peg postgraduate teacher training tuition fees to those of undergraduates provision. Consequently, fees for 2012-13 across the sector have mostly been set at £8,500- £9,000. Another significant strategic and ideological reconfiguration, that of training bursaries for postgraduate entry in 2012-13, was confirmed in the *Implementation Plan* published on 8 November (DfE, 2011b). Bursaries were to be targeted to incentivise high achievers and applicants for shortage subjects, with secondary bursaries ranging from £20,000 for an applicant with a first class degree in a key priority secondary subject (Physics, Mathematics, Modern Languages), to nothing for a non-priority secondary subject. Primary bursaries would range from £9,000 for a first class degree, to nothing for a trainee with a 2ii classification.

69. As each of the UK countries has a different fee, grant and loan structure for their home students, and for students domiciled in one UK nation and wishing to study in another, the funding implications can be profoundly difficult to navigate. In Scotland, the tuition fee for a full-time ‘new’ Scottish student studying for a postgraduate teacher training qualification or an undergraduate education degree has been set at £1,820. From 2012/13, the maximum fee for Northern Ireland students studying in Northern Ireland will be £3,465. There are no teaching bursaries or other incentives for teacher training in Northern Ireland or Scotland. In Wales, the maximum tuition fee set is up to £9,000, but there are fee grants available to cover tuition fees in excess of £3,465, although details of bursaries and other incentives are yet to be released.

70. Given that the vast majority of applications to GTTR are for institutions in England, the substantial drop in the application figures at the beginning of the round for the 2012 intake to postgraduate training programmes was not unexpected. In the event they received just 3,538 applications as of 24 October 2011, a 55.7% drop on the applications in the same week in 2010 (Robertson, 2011). This may have been caused partly by the lateness of the announcement of bursary levels for trainees in England. After the announcement, applications rallied a little (Robertson, 2011) so that by mid-November, in the secondary sector, the shortfall on the 2011 entry figures in key priority subjects was: Mathematics (27%), Physics (21%), Biology (27%), Chemistry (41%), Spanish (47%) and German (42%). The applications for English were down 39% and, more surprisingly perhaps given that primary bursaries were more generous than for the 2011 entry, the shortfall on the main 3/5-11 primary courses was 35%.

71. The undergraduate market is equally unstable. Across the UK in 2010, recruitment to Group X (undergraduate education) was 16,455 overall (46% for teacher training courses and 49% for academic studies in education) (UCAS, 2011a). This market, again, has been hit hard by the increase in fees in England. Early indications are that, while in mid-October 2011 total applications to UCAS were overall only 9% down on the same time last year, Group X applications were down 30.4%. The November 2011 figures show a rally, with education now only down 18.6%, although there is no indication how this is distributed across teacher training and other education courses, or how it is distributed across the UK. Recruitment overall to English institutions dropped proportionately more, down 12.9%, as the impact of the still buoyant recruitment to the early-entry courses, such as Medicine and Oxbridge, lessens. Wales is currently registering the greatest drop in applications (20.6% overall). Applications across home nations have been differently affected, depending on the relative levels of tuition fees between 'home' and 'other' domiciled students, and the proportion of non-home domiciled students the country traditionally attracted. An additional factor is the, as yet unknown, impact that worries about accumulating debt may have on students' choice of university; will they opt to live at home to mitigate the greatest cost, living expenses? Notably also, the impact on applications from mature entrants was disproportionately greater than the 12.9% overall average reported in November: the number of applicants aged 25 to 39 was down just over 20%, and that of those aged 40 and over was down 25% (UCAS, 2011b).

72. ITE for the post-compulsory sector shows every sign of being in as much difficulty as the school sector. There are no sector-wide institutional allocations, and sizes of provision tend to be more historical than strategic. Data from Lifelong Learning UK (LLUK) show the numbers in England registered on HEI validated CertEd/PGCE (PCET) in further education colleges to be over 23,000 in 2007/08 (LLUK, 2009). This drops to around 21,000 in 2009/10 (LLUK, 2011). This represents about 18% of all the teaching staff in further education. The higher education-based PGCE (PCET) constitutes around 50% of all initial teaching qualifications gained, and in excess of 70% of the longer teaching awards, and it is likely that over 80% of students are part-time and in-service. Bursaries and other incentives have, from time to time, been available for full-time PCET trainees, and discussions are currently under way to agree a new scheme. However, the future of PCET in England is now profoundly uncertain for a number of reasons: (1) demand has been dropping since 2008 due to recessionary forces; (2) a fee increase to around £9,000 for full-time, and up to £4,500 for part-time, is likely to deter trainees; and (3) the option to allow providers to be accredited in their own right will most probably result in a shift in numbers to alternative and significantly cheaper awarding bodies. As a result, the further education initial training provision in HEIs is facing a major fight for survival. Although it is possible that bursaries and student finance arrangements may offset some of the increased fees for trainees, most colleges are likely to find them a major barrier to continuing partnership with an HEI, especially when they have the option of running the provision for themselves (Crawley, 2011).

73. The decline in teacher training intake numbers, coupled with the likely impact that the rise in undergraduate and postgraduate fees and the reconfiguration of postgraduate bursaries will have on recruitment, has the potential to render both postgraduate teacher training, and undergraduate education courses, extremely vulnerable in each of the UK nations. Whereas the situation in Wales is reaching stability after a structural reorganization and years of cuts, the diagnoses in Scotland and Northern Ireland are acute to varying degrees, but the treatment proposed seems relatively measured and proportionate. In Scotland, the Donaldson review recommends: more accurate and well-informed workforce planning; improved quality of intake (wider pool of applicants and better selection procedures); review and reform of routes into teaching; development of a more coherent learning journey leading to Masters-level accreditation; and a strengthened model of partnership, offering high quality school-based mentoring and professional learning opportunities monitored by school inspections. In Northern Ireland the current teacher training infrastructure is thought to be “not sustainable, particularly given the number of unemployed teachers, teachers on short-term contracts and other, real, financial priorities” particularly when “the indications are that the numbers will further decline or at the very best, remain static” (DELNI, 2011). The proposed merger of Stranmillis College (largely undergraduate provision and reduced by 33% in the last five years) and Queen’s University (largely post-primary and Masters and doctoral programmes in education) was triggered by the former’s parlous financial prospects. But the Northern Ireland proposals now go further: to undertake a feasibility study of “a more shared and integrated system for the delivery and funding of teacher education” (DELNI, 2011).

74. The instability will probably be felt most acutely by English providers because of the particular conjunction of factors. Neither is there likely to be much comfort over the horizon, as the anticipated shift of the leadership of teacher training into the school sector, heralded in the Education White Paper (DfE, 2010), gains momentum. In terms of initial training, significant effects of the increasing numbers of Teaching Schools (up to 500 in the current parliament), the introduction of the Schools Direct model of training (500 in the first instance), and the attempt to re-energise school-centred ITE is unlikely to be felt before the end of the current parliament. And by then the demographic downturn in numbers of 18-year-olds will have reached the higher education sector, bringing with it other concerns.

Continuing professional development (CPD)

75. CPD is another area that has experienced a significant reduction in funding levels in England this year. In the first half of the 2000s the annual CPD budget specifically to support postgraduate training for teachers was estimated to be £23.5 million. These funds were distributed by TDA, on behalf of the (then) DfES, to award-bearing INSET providers, including HEIs, and supported a range of postgraduate certificates, diplomas and Masters degrees. The criteria for assessment used in the bidding process related to national priorities and the potential impact on raising standards in schools. In 2001-02, providers reported nearly 25,000 module registrations, estimated to be around 10,000 full-time equivalent registrations, but this dipped considerably in the subsequent three years (Soulsby and Swaine, 2003). The INSET bidding requirements, together with strong competition from the National College of School Leadership’s portfolio of awards, and the extensive professional development programme that accompanied the implementation of the National Numeracy and Literacy strategies, resulted in considerable loss of capacity in some English HEIs at this time.

76. In 2005-06, the TDA launched the postgraduate professional development (PPD) funding programme, with a triennial bidding process. Initially, 58 provider partnerships received funding, rising to 71 in the academic year 2007-08; more than three-quarters were based on HEIs, and the remainder on professional associations, local authorities and schools. In 2007-08, £26.7 million was committed by the TDA for PPD funding and there were more than 25,000 registrations for 60-credit Masters-level modules. This represented

an 11% increase on registrations in 2006-07, and a 34% increase on 2005-06. (TDA, 2009). The PPD programme had grown significantly in capacity and popularity, and continued to do so during the second triennial bidding round (2008-11), when between £27 and £29.6 million of funding was committed annually. PPD funding came to an end in 2010-11 (other than for teachers continuing through the scheme in the academic years 2011/12 and 2012/13) (TDA, 2005-2011).

77. The national MTL programme, the flagship of the New Labour Government's policy to make teaching a Masters-level profession in England (DCSF, 2007), was launched with a pilot for all Newly Qualified Teachers in the Northwest and in National Challenge Schools elsewhere. After an extended development phase the first, and in the event only, cohort embarked in April 2010. In total, £30m was committed to the programme in the first two years, and its demise was announced by the new Government less than a year later.

78. The Student Associate Scheme was another English teacher education funding stream axed in 2011. It was launched in 2003-04 to offer undergraduates the experience of a brief teaching placement to inform their career choice. Funding to the level of £14m to £18m was committed to the scheme annually, although much of the money was passported directly to the participants and placement schools. The scheme began to focus increasingly on placements in secondary priority subjects before it was closed in September 2011 (TDA, 2005-2011).

79. In England, CPD funding specifically earmarked for teachers, provided through central government and its agencies, currently seems to be limited to the new National Scholarship Fund of only £2 million in 2011/12, with a similar amount likely to be available each year. The scheme, which encourages Masters-level study, will award scholarships to about 600 teachers (50% in the area of Special Educational Needs and the remainder to support subject enhancement in English, Mathematics and Science). It is not yet clear how other aspects of CPD for the education workforce, including courses currently supported by HEFCE funding, will be funded in future.

80. In Scotland, CPD funding is a mixed picture. The national CPD Team, which used to sit within Learning and Teaching Scotland (LTS), is now part of Education Scotland (formed from the merger of LTS and HMIE). The 32 local authorities are responsible for teachers' professional development, alongside their other priorities. There has been some government support for particular programmes, such as subject specialist training for primary teachers in Science or Physical Education. Another example of a centre funded by the Scottish Government, and which provides specialist CPD, is the Scottish Centre for Information on Language Teaching, based at the University of Strathclyde.

2.3.5. Funding streams: Other postgraduate funding

81. There seems to be a trend towards increased selectivity in funding postgraduate research (PGR), by both the ESRC (and soon the Arts and Humanities Research Council) and HEFCE. The ESRC's mechanism is clearer, with the 20 DTCs, so we can already consider the implications. The HEFCE mechanism for supporting PGR students had yet to be finalised at the time of writing, and it is not clear how it is going to operate as a mechanism for increased selectivity. Nevertheless, it seems possible that the research training available may become more limited in some institutions. Most institutions acknowledge that there are other benefits – not just financial – to having PGR students, yet the sustainability of provision may be in danger, and thus these further benefits unobtainable.

82. The total number of ESRC-funded postgraduate places has been relatively constant over the past five years. From 2011/12 the ESRC has structured its postgraduate funding around a DTC model over a five-year accreditation period. DTC arrangements are based on concentration of training provision around research-intensive institutions; the variables for the algorithm used to calculate the allocation of the 600 places available among the 21 institutional and consortium DTCs accredited include: FTE social science staff numbers; percentage of 3*/4* RAE output; 3*/4* RAE environment; ESRC research income; and percentage of excellent (5/6 or 6/6) peer review grades (www.esrc.ac.uk, accessed 24 November 2011). Detailed information on the distribution of studentships will be published by the ESRC in early 2012. However, based on the geographical distribution and structure of accredited DTCs, there seem to be areas of opportunity (for example, for collaboration), but also areas of risk (particularly for some parts of the sector, such as teaching-intensive institutions, and for some geographical locations, given the higher concentration of DTCs in the South East of England).

83. The risks are likely to be compounded by the withdrawal or reduction in 2012/13 of the HEFCE teaching grant for taught postgraduate provision in HEFCE Price Groups C and D. Together with a likely increase in postgraduate fees – possibly triggered by the increase in undergraduate fees – these factors may lead to a marked fall in the take-up of Masters places in HEI education departments, with further possible impacts cascading on to PhD take-up. Particular risks affect the take-up of increased-fee part-time courses by teachers who are currently experiencing flat public sector pay, thus potentially affecting the development of teaching as a postgraduate and research-informed profession. There may be further issues about the content of training provision, too, if the division between teaching and research functions in HEI education departments becomes stronger.

2.3.6. Focus of research

84. Changes in the substantive and methodological direction of education research over the past decade or so are more difficult to track than those in institutional infrastructure, finance and staffing. Some indication of possible shifts may be glimpsed from reviews of RAE submission data (although these exclude the outputs of staff and institutions not submitted). These data suggest some division of labour between different types of institutions, as well as some diversification of research interests in the recent years (Oancea, 2009, 2010; Oancea and Furlong, 2007).

85. Historical RAE data suggest some division of labour across the different levels of mainstream funding for higher education departments. For example, Basseley and Constable (1997) looked at the distribution of the publications included in submissions to RAE 1996 across a diversity of 'fields on enquiry'. They found that school/teacher/child issues, governance, disciplines in educational settings, and methodology featured more prominently among the interests of the higher-rated institutions; while curriculum issues, teacher education, and INSET were more likely to be pursued in the lower-graded departments. However, using outputs data from the same RAE, Kerr et al (1998) found that the coverage of the overarching themes included in the study's analytic framework was comparable across all levels of the rating scale, with the exception of a lower emphasis of the two 5* institutions on the theme of professional development.

86. A 2004 review of the distribution of education research expertise in the UK (Oancea, 2009), using submission data on research groups from RAE 2001, found that departments rated 3a and under seemed more likely to submit research on teacher supply and retention, post-compulsory education and training, and teaching and learning in specific educational settings. Departments rated 4-5 had been more likely to submit research groups in the

'disciplines' – Sociology, Politics, Philosophy of Education, as well as longitudinal and large-scale research.

87. Data on the latest RAE indicate a more distributed, broader field of funded education research, but a persistent backwards influence of anticipated assessment over the nature and scope of research being carried out in HEI departments of education. Respondents to the UCET/BERA RAE 2008 review (Oancea et al, 2010) reported some form of pre-submission influence of RAE 2008 guidelines (and, thereafter, of anticipations of the REF) on the focus of their department's research and on the ways in which it had been reflected in department-level research organisation and administration. They described perceived pressures to align more closely their substantive and methodological focus with that of RAE-able research groups in the department. According to the education sub-panel's chair, Margaret Brown (2009, p.16), submissions to RAE 2008 indicated "a broadening of the field of education research, including more HE (policy, governance, pedagogy and ICT) more community/informal education (including children's services), more psychology (including neuroscience); more language-based studies; and more global/citizenship education", with "corresponding decreases in some previously more popular areas like leadership, teacher education, international/comparative education". Areas of current policy interest that were deemed "relatively poorly served in terms of quantity of outputs" included "assessment; middle management; classroom teaching/learning in subject disciplines; further and adult education; creative/expressive aspects of learning; pastoral care; human rights and legal contexts; economics of education". Methodologically, the panel noted "more applied work; more longitudinal studies; more, and more sophisticated, quantitative work; and more systematic reviews" (Brown, 2009, p. 16).

2.4. Challenges and opportunities for the future

88. The data suggest that over the past two decades there has been considerable change in the scale and standing of education research, relative to other social science fields of inquiry in the UK. Overall, evidence for the decade up to 2010 shows expansion of the field of education within HEIs in terms of FTE staff in education departments. However, this expansion was not matched by comparable increases in research funding and research capacity, and significant decline now seems likely.

89. In teacher education there is likely to be a growing instability of institutional capacity resulting from: a loss of student numbers due to demographic change; the vulnerability of programmes as a result of policy changes; the ageing profile of staff and the difficulty of recruitment in a labour market where the funding level of HEIs has been depressed for a number of years compared to the school sector; a professional learning landscape increasingly driven by national and school-level priorities, rather than individual needs, together with competition from school and system-led and delivered CPD.

90. The data presented in this section do not unequivocally support the notion that education research and teacher education are inextricably linked. Indeed, there is evidence of an increasing divide between the teaching and research functions within education departments, as well as between different institutional missions across the HEI landscape. It is, nevertheless, the case that a dramatic decline in funding for either education research or teacher education would significantly alter the nature of many, if not quite all, education departments in UK HEIs. As Sir Robert Burgess, Vice-Chancellor of Leicester University, put it to a recent House of Commons Select Committee inquiry on 'attracting, training and retaining the best teachers', education departments:

"are highly dependent on the PGCE route, but as CPD is also cut, they are also highly dependent on that stream of income. The other stream would be the money

that comes from educational research. Usually in Schools of Education you have groups of people who work with PGCE students, a group of people who are working on CPD and postgraduate programmes generally, and a group of people working on educational research who also have a mixed economy across those streams” (HoC Education Committee, 7th December, 2011).

91. Although the overall change in the field of education has so far been gradual rather than abrupt, and although most disciplines have experienced some changes in the light of growing selectivity and concentration of funding, the trends in research funding and research capacity identified here confirm that the next few years may indeed be a particularly critical period in the development of education research in the UK. In addition, the concurrent instability in the funding of teacher education could raise questions about the future of the departments in which most UK education research is conducted.

Section 3. SWOT Analysis

92. Participants at the workshops organised during this review were invited to reflect on challenges and opportunities for education research in the current and medium-term future context. Figure 13 summarises their suggestions. Section 4 of this report provides our own assessment of the risks and opportunities.

Figure 6. SWOT analysis based on review workshops



Section 4. Moving forward

4.1. Multiple challenges

93. Sections 2 and 3 have identified a number of emerging challenges that face education research in the UK's HEIs. It should also be recognised that all of the social sciences are facing a challenging time, although the threats may be particularly severe in the case of education. Education as a field may learn from experience elsewhere how to promote and highlight the value of social sciences more generally (for example, the Academy for Social Science campaign, www.campaignforsocialscience.org.uk). However, although such comparisons can be valuable, we do need to focus in the present context on how best teacher educators and education researchers, through such organisations as BERA and UCET, can collaborate in responding imaginatively and vigorously to the current challenges.

94. In considering these challenges, we are compelled to draw attention to matters of timing. The review group gathered data during 2011. Most of these data, as presented in Section 2 above, are retrospective and it is our view that the full impact of recent policy changes has not yet emerged. If the trends that have been reported in Section 2 are sustained, we fear that worse is yet to come, across the UK. The 'implementation plan' for the White Paper affecting English teacher education, that originally gave rise to the present review, was published in November 2011 (DfE, 2011b), but it is still unclear – mainly through lack of detail – what the likely impact will be on university departments of education in England.

95. We already face a combination of pressures. There is, firstly, the demographic time-bomb: the aging profession and the non-replacement of expertise directly threaten the sustainability of a strong research community. Secondly, the radical changes in the research funding environment create a strong barrier to research engagement and development. Thirdly, teacher education faces a period of very significant and destabilising change. Taken singly, these developments would be challenging enough. It is our view that, together, they create for teacher education and education research an especially daunting environment. Even the evidence we have been able to gather so far fully justifies the decision by UCET and BERA to undertake this review.

96. Furthermore, we face these pressures when there is continuing evidence of governmental support for increased selectivity, both within teacher education and in research policy. Graham Stuart, Conservative Chair of the House of Commons Education Select Committee recently gave the following account of what he believed to be the Government's vision for teacher education, when he asked a witness:

“might we not see a concentration of fewer, higher-quality, more assured HEIs? Aren't there rather a lot at the moment, and some of them are pretty dubious on economics, viability and other issues? May we not see a consolidation at one level of HEIs, while spreading the engagement of schools? That is the Government vision, isn't it?” (HoC Education Committee, 7th December, 2011).

97. Both BERA and UCET are fundamentally committed to securing and sustaining high quality in teacher education and in education research, preferably in close association with each other. But the tendency in government thinking to favour 'the best' universities – as reiterated in the DfE implementation plan, for example (DfE, 2011b) – may threaten prospects for quality at those institutions deemed not to fall into this category. There may, in other words, be a tension between securing a breadth of quality – to the benefit of the whole education system – while at the same time achieving depth in the form of 'outstanding' provision in research and teacher education. Yet it is also possible that some research-

intensive universities will decide, as one witness hinted at that same Select Committee hearing, that ITE is economically unviable, or even that the new arrangements for university involvement in it are too onerous to justify remaining in that area of work. This, in turn, could have consequences for the nature of the education research they carry out, and even for the departmental contexts in which it is undertaken. This means that education departments in all universities need to consider urgently what future they envisage for themselves. Here, though, we will focus on the need for UCET and BERA to help the sector as a whole to develop a coherent approach to sustaining a healthy education research community in the UK.

4.2. The importance of the field

98. No field of modern human endeavour, whether within or beyond the academy, can flourish without a strong research base. The enlargement of our understanding, the enhancement of the quality of public services, the nation's economic productivity, the well-being of the community, the wisdom and effectiveness of public policy, all depend on the maintenance of a vigorous research culture.

99. In the field of education, research has a vital role to play in developing the quality of educational provision for learners, in enriching the work of education professionals, and in informing the policy-making process. A wide range of research activity is essential to sustain the health of educational provision: the 'blue skies' research that enhances knowledge and feeds innovation; the long-term longitudinal studies of educational effects and interventions; the independent evaluation of policy; and the practitioner research within school and college classrooms, with its sharp professional focus. All of these systematic ways of studying education contribute to the enrichment of our discipline and of educational provision. They are also, in their various ways, a stimulus to further research activity and are thus crucial to the sustenance of a vibrant research community, which is predominantly located within departments of education that also undertake teacher education.

4.3. Mitigating threats

100. If many of the threats to a flourishing teacher education and research culture cannot be easily eliminated, they can at least be mitigated. For example, we can work doubly hard to maintain close links between policy-makers, practitioners and researchers. Hopefully, the days are gone when these three groups were characterised by mutual suspicion, if not incomprehension. We need to ensure that lines of communication are held open and seize every opportunity for collaborative engagement. We must, in addition, continue to strengthen collaboration between organisations such as BERA and UCET: common interests demand concerted action. That collaboration needs to be extended to our closest neighbours in continental Europe, and to those beyond. We need to see ourselves as members of an international academic and professional community, learning from experience elsewhere and building the kinds of partnerships that carry leverage in our own contexts.

101. There is no doubt that funding for research initiatives will come under intensifying pressure in the short to medium term. As government funding diminishes there will be a need to diversify the sources of financial support for research, redoubling our efforts to attract funding from the charitable foundations, and seeking to exploit the funding agencies in Europe. Nor can we afford to ignore the funding opportunities that are to be found through collaborative research initiatives with other departments and schools within HEIs. There is a

tendency for education research to be so sharply focussed as to be accused of being inward-looking. The creation of new institutional frameworks, which bring education, social work, health, and other domains into close academic partnership, should help to weaken isolationist tendencies and to create new contexts for inter-disciplinary and inter-professional research.

102. Furthermore, we perhaps need to be more assertive in drawing attention to the long-term deleterious impact of short-term underfunding. The stop-go funding mentality is the enemy of a strong research tradition. That more vocal defence of research has to be complemented by equally vigorous affirmations of the value of the universities' involvement in teacher education and teachers' professional development. We should also speak with a more insistent voice about the need for much stronger investment in the recruitment and training of education researchers.

4.4. Seizing opportunities

103. Even gloomy scenarios, when scrutinised with sufficient care, reveal opportunities. For instance, the impact agenda in the REF could play to the strengths of a great deal of education research in a much more obvious way than is case for some other social sciences (Reiss *et al*, 2010; Francis, 2010). It requires institutions to maintain strong 'user engagement' and, in order to demonstrate impact, they will need to cultivate the very forms of partnership that are now well established in teacher education. Particularly in the context of research on teacher education, the stronger involvement of constituents in determining the research agenda and in monitoring its impact, is consistent with our existing direction of travel, as is clear from various contributions to *Research Intelligence* 116 (Oancea, 2011).

104. Opportunities are also created by the spread of international measures of school achievements. The work of agencies such as the OECD, through their PISA surveys, attracts strong government interest. Researchers have a valuable role to play in interrogating international league tables and in evaluating the extent to which such results call for interventions or changes in policy.

105. The establishment of a restricted number of DTCs might be interpreted as a restriction in opportunities for both institutions and would-be researchers. However, the case is overwhelming for DTCs to distribute much more widely the benefits they confer, so that the investment in research training is fully maximised. Institutions hosting DTCs will need to be alive to the reciprocal benefits that will accrue from collaboration with other parts of the sector.

106. Perhaps the most interesting opportunity in the present English context is the creation of Teaching Schools and University Training Schools. Similarly, in Scotland, the Donaldson Report is encouraging the development of 'hub schools'. It would be odd if universities, having addressed the administrative difficulties of establishing a training school, could not exploit the research opportunities entailed. Since the announcement of their introduction, it has been decided to fund Teaching Schools in England to undertake education research (albeit on a small scale), as well as to require them to collaborate with at least one university. There are thus opportunities here to build on the successful university-school partnerships that already exist across the country.

107. While acknowledging that education research can flourish in many different contexts (including higher education), schools and colleges are natural, perhaps the most appropriate, contexts for research on teaching and learning. We believe that all teacher education centres, whether or not they are in receipt of QR funding, should therefore form

strong collaborative relationships with schools or clusters of schools, whether or not they are designated Teaching Schools. Among the reciprocal benefits to be derived from such collaboration are the schools' access to support in the evaluation of their educational effectiveness and the enhancement of teaching and learning. Through such collaborative initiatives teacher educators become primary agents of knowledge transfer, a development that should receive an impetus from the REF.

108. Another form of collaboration here would be the development of Masters-level programmes to support school development activities. Schools selected for this extended role might be expected to be strong self-evaluating institutions, committed to enhancing the quality of their work. Such developments will be able to build on the existing schemes across the UK for Masters-level work within ITE, as well as on the experience of the Chartered Teacher schemes in Scotland and Wales, the aborted initiative around the MTL in England, and the recent proposals for a Masters in Educational Practice in Wales. University researchers and teacher educators are in prime positions to support such work. Indeed, in combining such ideas with those of teaching and training schools, we might envisage the establishment of a number of education research teams comprising a mixture of university and school/college-based staff.

109. Finally, and as indicated at several points above, we should not discount the benefits that follow from devolution and the variations of practice that are to be found in the different jurisdictions in the UK. We have here a ready-made context for the systematic analysis of the governance of education, of policy initiatives, and of interventions designed to influence professional practice.

4.5. The evolution of partnership

110. It seems, then, that the pressures that confront research and teacher education together may create an opportunity for the enhancement of partnership between schools and universities. What might that entail?

111. One corollary of the intensification of research selectivity is that we accept that we have a differentiated system, with QR research funding in particular being increasingly concentrated in a diminishing number of centres. Would an alternative formulation be that we create strong networks of specialist research expertise that are trans-institutional and transcend geographical boundaries? Would that less exclusive formulation allow us to retain selectivity but facilitate the emergence of specialist research networks, drawing members from different institutions and locations?

112. If excellent teaching and excellent research are logically distinct, is it unreasonable to expect strong teacher education programmes to flourish in institutions that attract no QR funding? Is it not sufficient to ensure that teacher education programmes are research-based, that they should draw on the best research available on effective teaching and learning, and that they should nurture a critical and questioning approach to educational practice and provision? These are difficult questions that we believe the sector as a whole, as well as individual institutions, needs now to confront, even if we have sought to avoid them within BERA and UCET in the past.

113. Ideally, we might wish every teacher educator to be a distinguished researcher. But what happens when research opportunities are restricted? Would it be sufficient to insist that teacher education programmes, wherever they are located, should be taught by those who are able to analyse, synthesise, critique, interpret and, importantly, contextualise research

findings in ways that promote the kind of research-mindedness that should characterise all effective teaching?

114. Whatever the answers to these questions, we would no doubt wish to see all teacher education centres funded to discharge research-related activities, quite separately from QR funding. However, if that funding is not forthcoming, if selectivity is intensified, and if the fiscal stringencies tighten still further, will teacher education institutions not have to be inventive in freeing the resources necessary for much more intensive collaboration across the sector? Across the various networks, would there not need to be established far more information exchange, far more sharing of resources, and far more cross-institutional planning of the kind that aims to eliminate what, at present, is often duplicated effort? How can we abolish the not-invented-here syndrome and the arm-round-the-jotter mentality, the twin enemies of the kind of collaboration that is now required to sustain a vibrant research culture and a high-quality teacher education?

115. However, even if HEIs, schools and colleges are successful in grasping these opportunities to develop research in partnership with each other, this will not address the full range of education research activity that is required for the sustenance of our discipline and of a healthy and democratic education system. As noted earlier in this section, school and college-based research on learning and teaching is but one element of what is required, and work with other disciplines and departments, as well as with wider stakeholders, will also need to be part of our agenda.

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Notes

¹ The single score is calculated by multiplying the volume of staff at 3* and 4* in each 2008 RAE submission by the quality weightings (1 for 3* and 3 for 4*) and then summing the outcomes to produce a single score for each submission (HEFCW, 2011).

² It should be noted that Cardiff University submitted a substantial amount of education research to the sociology sub-panel in RAE 2008 and this continues to be funded at a significant level.