



DIVERSE MISSIONS

ACHIEVING EXCELLENCE AND EQUITY
IN POST-16 EDUCATION

WENDY PIATT

The ippr

The **Institute for Public Policy Research** (ippr) is the UK's leading progressive think tank and was established in 1988. Its role is to bridge the political divide between the social democratic and liberal traditions, the intellectual divide between academia and the policy making establishment and the cultural divide between government and civil society. It is first and foremost a research institute, aiming to provide innovative and credible policy solutions. Its work, the questions its research poses and the methods it uses are driven by the belief that the journey to a good society is one that places social justice, democratic participation and economic and environmental sustainability at its core.

For further information you can contact ippr's external affairs department on info@ippr.org, you can view our website at www.ippr.org and you can buy our books from Central Books on 0845 458 9910 or email ippr@centralbooks.com.

Our trustees

Chris Powell (Chairman)
Chai Patel (Secretary)
Jeremy Hardie (Treasurer)

Professor Kumar Bhattacharyya
Lord Brooke
Lord Eatwell
Lord Gavron
Chris Gibson Smith
Professor Anthony Giddens
Lord Hollick
Jane Humphries
Roger Jowell
Neil Kinnock
Richard Lambert

Professor David Marquand
Frances O'Grady
Sir Michael Perry
David Pitt-Watson
Dave Prentis
Lord Puttnam
Sir Martin Rees
Jan Royall
Ed Sweeney
Baroness Williams
Baroness Young of Old Scone

CONTENTS

Acknowledgements

About the author

Executive summary

1. Diversity...past, present and future	1
2. Diversity...teaching	16
3. Diversity...research	34
4. Diversity...business	51
5. Diversity...structure	59
Bibliography	70

Acknowledgements

I would particularly like to thank Mick Fletcher, Richard Brown, Michael Brown, Gareth Williams and David Robertson for providing information and comments on earlier drafts of the report. We are also most grateful to Microsoft, CITB, Liverpool John Moores University and the LSDA for their generous financial support. From April to September 2003, the ippr ran a series of seminars on a range of issues relating to the Learning and Skills Sector and Higher Education and these discussions contributed to the findings of the report. I would, therefore, like to thank all the speakers and everybody who participated. However, the views expressed in this report are solely those of the author.

About the author

Wendy Piatt was a Senior Research Fellow at the Institute for Public Policy Research specialising in education. She has published numerous articles and reports on further and higher education and social mobility including the December (2003) edition of *New Economy* on social mobility, *Paying for Learning* (2000) and *Opportunity for Whom? The funding and structure of post-16 education* (2001) – a report which was widely considered to have influenced government policy on the funding of further and higher education. She worked on the White Paper, *The Future of Higher Education* (2003), while on secondment to the DfES and now works in the Prime Minister's Strategy Unit.

Executive summary

The word 'diversity' has become fashionable in the political arena and acquired several meanings depending on context. For many, the word signifies a multicultural environment. This meaning is relevant to the internal diversity of the student population in educational institutions and to the Government's widening participation agenda, which we address briefly in this report. However, the primary focus here is on diversity *between* rather than *within* institutions. We are exploring how far the post-16 sector is composed of institutions with distinct missions, characteristics and activities and whether more diversity is a desirable objective.

The rationale underpinning the government's promotion of a **diversity of providers** is that public services must be more responsive to individual need particularly because it is thought that individuals (and employers) are now more discerning and sophisticated consumers and used to a wide range of choice. **Choice** is not just a matter of a wider selection of providers but more importantly, a spur to quality through greater **competition** between several potential providers. Diversity can also increase quality through greater **specialisation** and more distinct and refined institutional missions. However, at the same time as promoting competition between providers, public policy wants to promote **collaboration** between them without specifying in detail how collaboration and competition are to work alongside one another in the quasi-markets the government has set up in the core public services.

The present Government has reiterated and amplified the call for greater diversity made by successive governments particularly in *The Future of Higher Education* (2003) and *Success for All* (2002). But the Government's stance is still subject to a range of interpretations. For some, New Labour is challenging the idea that greater equality necessarily entails uniformity – 'the levelling down' principle. But for others, diversity is a euphemism for inequality. For them, difference inevitably leads to hierarchy, elitism and social polarisation. This report addresses these key questions: is diversity compatible with equality? Does greater diversity promote greater choice, competition and specialisation and higher quality, cost-effective provision? How far are competition and collaboration compatible? How much diversity is desirable?

Institutions in the Learning and Skills Sector (LSS) are generally more responsive to student need and place greater emphasis on teaching than those in Higher Education (HE). But many institutions in both HE and the LSS are still not sufficiently responsive to student and employer need.

Differential fees should make HE institutions more responsive and if so the cap on fees might eventually be increased to allow greater differentiation between institutions, empower students and improve the quality of teaching. However, this should only occur if the Government's planned review of the impact of the new system, particularly on participation amongst the lower social groups, indicates no adverse effects. As this review is not due to report until 2009, further reform of fees in HE is some way off. There is currently no evidence to suggest that differential fees will restrict access and entrench elitism.

The Government should also go ahead with proposals to relax the criteria for university status; teaching-only or teaching-focused universities and colleges have a role to play in delivering HE. A 'scholarly environment' is essential for genuine higher education but not all institutions should be expected to engage in high-level research. Much HE is already taught in FE colleges and this proportion is set to rise with the Government's promotion of the Foundation Degree which will primarily be provided in FE colleges. Consequently, the Government should adopt a more coherent and consistent approach across the LSS and HE and follow the Scottish Executive in revising the legal definitions of FE and HE. However, the consequences of any move to merge the respective funding councils for the two sectors should be carefully considered.

While most traditional research is conducted in HE institutions, some significant research and development takes place in the LSS. Some colleges should be encouraged to develop a mission in business-related research. The pilot schemes in Sussex suggest that the 'college for business' could be an effective vehicle to facilitate this mission. In order to establish this mission, colleges should be permitted to access 'third leg' funding from the Higher Education Innovation Fund (HEIF) which is currently restricted to HE institutions.

The rationale for the distribution of research funding should be to promote high quality research both academic and applied wherever it occurs. Any funding system must recognise and reward innovation and talent wherever it is found. It should also not dominate the activities pursued in universities to the detriment of missions other than research such as engaging with business and the community. The RAE is flawed and costly and should be replaced by a funding system which channels funds through the research councils.

HE institutions in the UK have increased their revenue from industry over the past decade but there is scope for a substantial increase in funds

derived from business. All HE institutions should be engaged in basic business-related activities. Some should specialise in developing business-related research; they should be embedded in industrial networks and encourage secondees in and from industry. Knowledge exchanges should have a regional focus and be steered by a consortia of research-intensive, 'modern universities' and ideally an LSS provider.

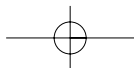
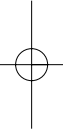
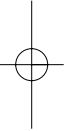
Greater specialisation has the potential to raise quality and respond to consumer needs but the Government should be wary of prescriptions for organisational change which are not based on sound evidence. For example, it is not clear that segregation according to age is in the best interests of the student. Greater specialisation and diversity should also be accompanied by more collaboration. Collaborative arrangements can bring many benefits to organisations but the obstacles to forming successful collaborations should not be underestimated. The Government should reduce the barriers to provide more incentives for institutions to collaborate. The same funding arrangements should apply to schools, colleges and HE institutions for the same task. Accountability mechanisms such as league tables which obstruct collaboration should be reconsidered. There are insufficient incentives for successful HE institutions to collaborate; collaboration should be a condition of the freedom to vary tuition fees.

Few would disagree that there are benefits to be gained from nurturing a diverse post-16 system – creating a consensus on what is meant by diversity, how much is desirable and how it is to be achieved is more problematic. A variety of providers offering a range of courses and modes of provision can increase choice, fulfil the needs of the 'consumer' and create a positive competitive environment. Greater specialisation and a more honed institutional mission can also improve quality. Genuine collaboration between more specialised institutions can also facilitate access and extend opportunities. Diversity is not incompatible with equality. The state has an important role to play in removing the barriers to diversity and collaboration and not perpetuating them with conflicting policies. But the Government should avoid the temptation to engineer and impose diversity through policies which are not sufficiently based on evidence. Ministers should create the optimum conditions for institutions to respond to the diverse needs of employers, students and the wider community and create what David Watson calls a 'genuinely complementary mosaic of differentiated institutions – colleges as well as universities'.

Key recommendations

- The Government should relax the criteria for university status; teaching-only and teaching-focused universities and colleges have a role to play in delivering HE.
- Academic staff at teaching-only institutions should be able to participate in research at regional centres perhaps based in departments which scored highly in terms of their research.
- Pedagogy in HE should be taken more seriously and incentives offered by the criteria for centres of teaching excellence and more grants offered by the research councils.
- Only if the Government's planned review of the impact of the new system of differential fees in HE indicates no adverse effects on participation amongst the lower social groups should the cap on fees be increased to allow greater differentiation between institutions and empower students.
- Government should adopt a more coherent and consistent approach across the LSS and HE and follow the Scottish Executive in revising the legal definitions of FE and HE.
- A credit accumulation and transfer system should be established covering both FE and HE.
- Some selectivity in funding research is necessary but the Government should not pursue a policy of greater concentration without stronger evidence of the benefits.
- The RAE should be replaced by a funding system which channels funds through the research councils.
- Some colleges should be encouraged to develop a mission in business-related research. The pilot schemes in Sussex suggest that the 'college for business' could be an effective vehicle to facilitate this mission.
- In order to establish this mission, colleges should be permitted to access 'third leg' funding through the Higher Education Innovation Fund, which is currently restricted to HE institutions.

- Government should reduce the barriers to provide more incentives for institutions to collaborate:
 - The same funding arrangements should apply to schools, colleges and HE institutions for the same task.
 - Accountability mechanisms such as league tables which obstruct collaboration should be reconsidered.
 - There are insufficient incentives for successful HE institutions to collaborate; collaboration should be a condition of the freedom to vary tuition fees.



1 Diversity...past, present, future

The word 'diversity' has become fashionable in the political arena and acquired several meanings depending on context. For many, the word signifies a multicultural environment. This meaning is relevant to the internal diversity of the student population in educational institutions and to the Government's widening participation agenda, which we address briefly in this report. However, the primary focus here is on diversity *between* rather than *within* institutions. We are exploring how far the post-16 sector is composed of institutions with distinct missions, characteristics and activities and whether more of this kind of institutional diversity is a desirable objective.

The issue of diversity is no less contentious and pertinent in other public services. The Government has been actively promoting a policy of diversity amongst and within schools with the establishment of City Academies and specialist schools. It has also encouraged the entry of a range of private providers of certain forms of health care to work alongside existing NHS providers. The rationale underpinning the government's promotion of a **diversity of providers** is that public services must be more responsive to individual need particularly because it is thought that individuals (and employers) are now more discerning and sophisticated consumers used to a wide range of choice. **Choice** is not just a matter of a wider selection of providers but more importantly, a spur to quality through greater **competition** between several potential providers. Diversity could also increase quality through greater **specialisation** and more distinct and refined institutional missions. However, at the same time as promoting competition between providers, public policy wants to promote **collaboration** between them without specifying in detail how collaboration and competition are to work alongside one another in the quasi-markets that government has set up in the core public services.

Successive governments and representatives in the post-16 sector have paid much lip service to the concept of diversity but it remains a slippery concept. Even the Dearing Commission on higher education was considered to have 'ducked' the issue by the editor of the Times Higher Educational Supplement. The present Government has reiterated and amplified the call for greater diversity particularly in *The Future of Higher Education* (2003) and *Success for All* (2002). But the Government's stance is still subject to a range of interpretations. For some, New Labour is challenging the idea that greater equality necessarily entails uniformity – 'the levelling down' principle. But for some, diversity is a euphemism for inequality. For others, difference inevitably leads to hierarchy, elitism and social polarisation. This report

addresses these key questions: is diversity compatible with equality? Does greater diversity promote greater choice, competition and specialisation and higher quality, cost-effective provision? How far are competition and collaboration compatible? How much diversity is desirable?

How diverse is the present system?

Diversity is a relative concept. The UK post-16 education and training system is already diverse compared to many systems in Europe but relatively uniform compared to the US. Certainly both the Learning and Skills Sector (LSS) and Higher Education (HE) have become more diverse both within and between institutions over the recent past. Diversification in HE was propelled by the policy of expansion in the 1980s and 1990s and by the Higher and Further Education Act 1992 when the polytechnics gained university status. This process is often described as a transition from an elite to a mass system.

Diversity in HE

Four main categories emerged from the process of 'massification':

- the **Russell Group** of 17 research-intensive institutions
- the **'94 group'** including universities like Essex
- the **Coalition of Modern Universities** (CMU) composed of former polytechnics, and
- **SCOP** – the Colleges of Higher Education.

In addition, there are 38 members of the 'non-aligned group'; they include both pre-1992 and post-1992 universities who do not want to be aligned with any of the groups above but share characteristics with institutions within these 'categories'.

The Learning and Skills Sector (LSS) is even more diverse. This is partly due to the fact that what was known as the Further Education (FE) sector was broadened to include school sixth forms and colleges and work-based training providers in 2001, although there was always considerable

diversity amongst FE colleges alone. This new bigger sector was called the LSS and funded primarily through the Learning and Skills Council (LSC). The rationale for the change was to create a much more coherent, integrated post-16 sector – but HE was the key omission from this reform.

Diversity in the LSS

The current range of providers and combinations includes:

- **FE colleges**
- **School sixth forms** – including those in schools with the age range 11–18, 13–18 and 14–18, and denominational, single sex, selective entry and grammar schools, as well as in specialist schools and City Academies.
- **School federations**
- **Sixth form colleges**
- **Colleges with distinctive focus** – these include agricultural colleges, horticultural colleges, art and design colleges, full-time adult colleges, residential colleges for students with learning difficulties and disabilities.
- **Community colleges** – these maintain a sixth form plus adult education provision. They may have a pupil starting age of 11 or 14.
- **Adult education** – includes stand-alone LSC funded institutions, LEA controlled institutions and provision delivered by FE colleges under LEA contract, voluntary organisations and community groups.
- **Work-based learning (WBL) providers** – varying in size, specialisms and national coverage. Providers can be independent private providers, FE colleges, local authority providers, voluntary and community groups.
- **Online learning provision** – college-based, consortia, learndirect, UK ONLINE

There is further diversity in the LSS according to:

Subject

There are a greater number of specialist institutions in the LSS than in HE. They include many colleges of technology and colleges of art and technology. Some colleges have regional specialisms; for example, catering, automobile engineering, building and construction. Some colleges have national specialisms; for example, marine engineering, refrigeration engineering, equine studies. By 2004 over 200 colleges and 37 companies conducting work-based training had established Centres of Vocational Excellence (CoVEs) in a wide range of vocations such as plumbing and electrical engineering.

Level and age

There is considerable diversity of level of provision within colleges – many general FE colleges take pride in providing a wide range of qualifications from basic skills to postgraduate study. There are approx 300 mixed economy colleges which provide a substantial proportion of HE provision in the UK. HE in FE amounted to 11 per cent of total HE provision in 2002. The HE qualifications taken are primarily HNC/D, Professional, Honours & Foundation Degrees. Many colleges have created units within the General College dedicated to the 16 to 19 age group or to particular subjects. Colleges are increasingly providing for the 14 to 16 age group. More than 100,000 14 to 16 year-olds were being taught in colleges in 2003, with that figure expected to rise to 120,000 in 2004.

The Sheffield College is representative of this internal diversity: it is the single largest provider of post-16 education and training in Sheffield. It offers work-based learning programmes and dedicated training for employers. It also provides adult and community learning, and its own consortium online learning, plus support for learndirect. The college also provides a range of HNC and HND programmes. It provides full academic and vocational programmes within dedicated sixth-form and vocational centres.

Socio-economic and ethnic mix

As a whole, the LSS is more socially diverse than HE. But there is considerable diversity between institutions with regard to student population. At most sixth form colleges, students have on average higher prior attainment

and are from higher social groups than their counterparts in general further education and tertiary colleges (GFEC/TCs). The proportion of learners recruited from the highest social group is 14.4 per cent in sixth form colleges compared with 7.5 per cent in general FE. Correspondingly over 27 per cent of general FE college students come from what approximates to the lower social groups but only 15.6 per cent of sixth form college learners. General FE colleges tend to attract a more 'privileged' intake than work-based learning providers. Whilst colleges provide for 34 per cent of white 16 year olds (with state schools providing for 27 per cent) the colleges provide for 57 per cent of Black 16 year olds and schools only 22 per cent. In part this may reflect the underachievement of black children at GCSE, but this factor does not explain why (for instance) disproportionately more girls than boys are educated in colleges rather than schools post-16 (DfES 2003a). As Geoff Stanton has observed: 'the government is worried about the selection procedures and social composition of universities – but perhaps the problem starts earlier' (Stanton 2004).

There is some disagreement over how much genuine diversity there is in the LSS and particularly HE. The Government has encouraged colleges to develop more focussed missions and attempted to create more specialisation in the LSS through the establishment of CoVEs. It is also thought that the Government is in favour of greater segregation according to age, particularly in the form of sixth-form colleges.

However, David Melville has argued there is little diversity of mission in HE as most universities offer broadly the same range of courses, all are involved in the core activities of teaching, research and engagement with business and the community (Melville 2003). Some institutions like Birkbeck or the Open University perceive teaching a certain clientele as their overriding mission but they still engage in other activities. To a great extent, the Universities UK (UUK) report on diversity in UK universities suggested that the HE sector is not hugely differentiated (Ramsden 2003). It concluded: 'The Russell Group and the 1994 Group share many features, and are generally comparable on most of the indicators considered within this report, but are distinguished chiefly by the fact that most members of the Russell Group have medical schools, and an emphasis on science and technology. Within the Russell Group a small number of institutions are outliers on the basis of the statistical information available, and if these were excluded from the analysis, the Russell Group and the 1994 Group would show very similar characteristics. The SCOP institutions are

to a certain extent differentiated between those which are specialist providers in the creative and performing arts and in education and those which are general providers’.

The main sources of differentiation in HE are in relation to:

Vocational courses

The new universities inherited a tradition of vocational courses from the polytechnics. But courses such as business studies did not just stay within the new universities – they were adopted by more traditional universities with an eye to popular demand. Similarly, the new universities were accused of academic drift by moving beyond their vocational bounds. Some of the vocational courses were at further education level. But the increase of FE in HE has largely been the result of mergers between universities and General FE or specialist colleges. A small but growing percentage of students in higher education institutions are following programmes at FE level. One in 20 of students in higher education institutions were reported as studying at FE levels in 2003, compared with one in 50 in 1997.

Socio-economic background

Expansion did increase the absolute number of working class students in universities. The ending of the binary divide aided this process as more working class students attended polytechnics than pre-1992 universities. However, expansion did not significantly diversify the student population as a whole by increasing the proportion of working class students in HE. But it did increase diversity between institutions in terms of the socio-economic background of their intake as again students from low income backgrounds tended to congregate in certain institutions – such as the University of East London or Wolverhampton. The CMU and SCOP institutions show a majority of institutions having more than 25 per cent of their students coming from the lower socio-economic groups. The Russell and 1994 Groups have broadly similar profiles, with none having more than 25 per cent of their students coming from the lower socio-economic groups. The figure drops to about nine per cent for Oxbridge. The percentage of the intake of students from the lower social groups at Cambridge actually fell in 2003/4. It is not certain how far cultural and peer group factors result in this concentration of working class students in certain institutions. The correlation of relatively low attainment and socio-economic group is clearly a major factor in the concentration of working class students in institutions with low entry requirements.

Mature and part-time students

Mature students in HE are now in the majority. The rapid and significant increase in mature students has diversified the student population as a whole and increased diversity between institutions as some HE institutions and colleges have specialised in catering for mature students – for example Birkbeck and Warwick. As a result, some institutions have offered more part-time and modular courses. When the figures are disaggregated by mode, there is a noticeably greater increase in part-time students than full-time at both undergraduate and postgraduate levels since 1994/5. While a significant proportion of the growth in part-time undergraduates can be attributed to a structural cause (the mainstreaming of the former Continuing Education courses in the pre-1992 universities in 1994/5) there is in fact a generally greater increase across the whole of the period in part-time enrolments as compared with full-time.

International students

A major feature of the development of higher education in the UK over the past two decades and even between 1997 and 2004 has been a growth in the number of international students. Overall, the growth in international numbers over the seven year period has been significantly greater than the growth in home students. The Russell group institutions have recruited by far the greatest number of international students with a majority of its members having more than 2000 international students.

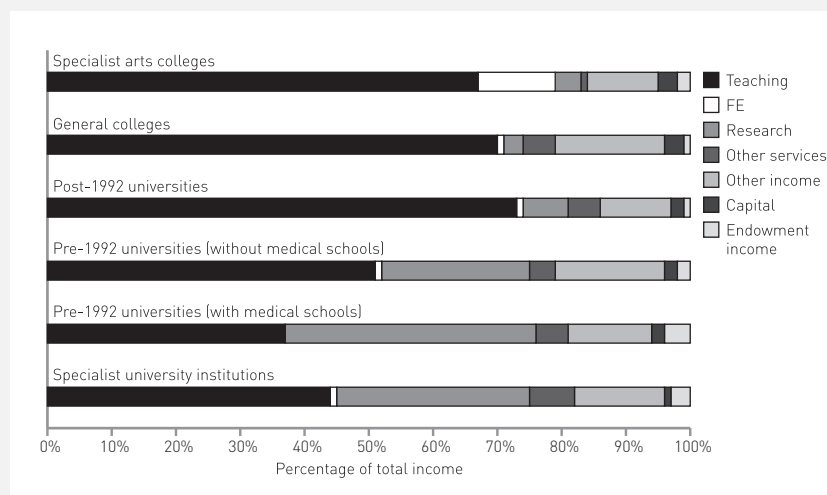
Ethnic minority students

Ethnic minority students as a whole are actually over-represented in HE but statistics mask the disparities in participation between different ethnic groups. Ethnic minorities make up 15 per cent of all students compared to six per cent of the working age population (NAO 2001). There has been no significant increase in the participation of ethnic minorities since 1994/5 but the heavy concentration of ethnic minorities in the CMU institutions (this partly related to geography) appears to be increasing over time. Half of the CMU institutions have more than 20 per cent ethnic minority students.

Activity and sources of income

There is considerable diversity between institutions in terms of their research as indicated by the concentration of research income within a small number of institutions. Imperial College London tops the group with

Figure 1.1 Income by activity type and institution type 1999/2000



a total research income of £153 million in 2001/2. It is followed by the universities of Oxford and Cambridge, and University College London, each earning about £150 million. The next nearest competitor is King’s College London, which had just 60 per cent of the amount earned by Imperial. The total research income for the top four institutions exceeded £600 million in 2001/2, and amounts to a quarter of that earned by all higher education institutions, according to analysis by Leeds-based company Evidence. Figure 1 demonstrates the diversity of income received by the main categories of university. In post-1992 universities, teaching income was over twelve times their research income, whereas for the pre-1992 universities with medical schools, the income from teaching and research was broadly similar in 1999/2000.

Factors driving inter-institutional diversity

A major determinant of education and training structures is national policy. As suggested above, major policies such as the incorporation of the FE sector in the 1990s or the decision to establish sixth form colleges can have an impact on structures for decades. This government has inherited and

promoted policies which encourage greater diversity and introduced new initiatives like CoVEs and Centres of Excellence in HE. How much diversity some of these initiatives create, however, is not yet clear. Similarly the government has inherited a legal distinction between FE and HE which preserves a nominal distinction between the two sectors but, as suggested below, the divide between HE and FE is becoming increasingly blurred.

Status and tradition play a role in sustaining distinctions between institutions; prestigious universities continue to attract a certain student profile; others are perceived to be 'access' universities. The concern that differential fees would create a 'two-tier' system in HE was often countered by the claim that HE was already 'multi-tiered'. Similarly some institutions are under-subscribed and others considerably over-subscribed and the assets and income of institutions continue to be a differentiating factor. Some institutions have inherited wealth, others earn a considerable proportion of their income from international students. The Research Assessment Exercise (RAE), the key instrument for allocating research funding selectively, results in a significant concentration of funds in a few institutions.

To a certain extent market forces have encouraged organisations to diversify and focus on their strengths. As Chapter 2 will discuss, the LSS has been compelled to respond to the needs of students and employers to a greater degree than HE institutions because they have been subjected to a more rigorous and demanding market.

Factors in driving inter-institutional uniformity

Collaboration can be the means by which diversity with excellence and equity is achieved. Although the promotion of collaboration is a key element in government thinking, current policy creates major barriers to collaboration between schools and colleges and HE institutions. These barriers include, for example, preserving a single institutional ethos (for example, FE incorporation, delegated legal powers to schools), creating competition (via performance tables) and allowing different contracts of employment and pay structures between schools and colleges. The barriers to collaboration discourage diversity as institutions have fewer incentives to concentrate on their strengths. The government also expects all universities to be involved with business and the community in addition to their traditional activities despite urging them to adopt a more focused mission.

The legal definitions of HE and the LSS may preserve the distinction between the sectors but can promote uniformity within each sector. For example, to gain university status institutions are expected to provide a universal offer including a broad range of subjects and recruit a minimum number of students. However, the Government is considering a relaxation of the criteria to qualify for the university title.

Current funding mechanisms and weighting play an important part in encouraging uniformity. As the rewards to research significantly outweigh other funding streams, universities tend to prioritise research activities. They also feel obliged to conduct research, however minimal the financial rewards they actually gain, in order to attract staff and students. Because most institutions have been heavily dependent on state funding, they have perceived the Government rather than student as the primary customer and not adequately responded to the needs of the latter. This dependence on limited state funds also means that institutions tend to bid for all 'pots' irrespective of the nature of the activity involved. So rather than concentrating on their strengths, institutions are tempted to 'cover all bases' so as to qualify for all available funds.

Whilst marketisation usually leads to greater diversity in response to diverse needs, some argue that because students are increasingly staying at home, they therefore require a fairly broad range of courses from their local providers. However, most students will be within travelling distance of several providers so the pressure on one institution to offer a very broad range of courses should not be over-stated.

Government policy

One of the government's key objectives is to create a more diverse post-16 system, in both the LSS and HE. The call for greater diversity has been made by successive governments. But conceptions of diversity, the rationale underpinning this policy and the means to achieve it differ. The Labour government's vision is of greater diversity both within and between institutions. Ministers lay emphasis on the goal of achieving a more diverse student population with greater numbers of students from lower socio-economic backgrounds and ethnic minorities: the widening participation agenda. They also aim to increase the diversity of providers encouraging greater differentiation between institutions and urging them to focus on their strengths. But how much diversity the Government actually wants is contested.

As the discussion above suggests there are contradictions and tensions in the trajectory of government policy. Some policies militate against the diversity and collaboration that government rhetoric promotes. There is also an implicit ambivalence in the Government's attitude to the market as a means of achieving its objectives. Competition and collaboration are not mutually exclusive but they are in tension. Whilst a differential fee scheme in HE signals a move to a more market-based system, the Government continues to try to intervene in the formation of qualifications and institutional arrangements. The White Paper on the Future of HE is almost schizophrenic in its juxtaposition of market solutions and state planning and echoes the tension between the new learning market and the LSCs in *Learning to Succeed*. Of course Governments have a role to play in regulating markets and providing incentives but the rationale for state intervention is not always made sufficiently clear. These issues are further explored in the chapters below.

Some claim that the Government would like effectively to restore the binary divide in HE with teaching-only institutions providing primarily vocational courses and a greater concentration of research in the upper echelons of the Russell Group of universities. Ministers have denied they aim to create a more stratified system and have rowed back from the level of concentration of research funding proposed in the 2003 White Paper. But they announced at the end of 2003 that no changes would be made to the RAE and dual-system of funding research – a system which was originally devised to promote diversity and selectivity in research activity.

If the Government proceeds in relaxing the requisite criteria for university status, the HE sector will become even more diverse with corporate universities and the NHS 'university' (NHSU). However, it is unlikely that ministers will follow the example of Scotland in bringing together the definitions of further and higher education. The Scottish Executive issued a document in 2004 suggesting that the current definitions produce anomalies which could be barriers to change (Scottish Executive 2004). It argued that alternative definitions could be based on Scotland's pioneering qualifications framework, which has created a 'national language' for all mainstream qualifications. It also proposed a merger of the separate funding councils for the two sectors. The key opportunity to create a more coherent approach to FE and HE in England came with the establishment of the LSC but it was decided to exclude HE from the LSC remit. The Government justified this omission by claiming that the addition of HE to the responsibilities of the new body would have 'complicated' the situation further.

In the LSS, Centres of Vocational Excellence were introduced in 2001 as an incentive to concentrate on an area of strength within the general FE college. Colleges are expected not only to fulfil the traditional mission of widening participation but also to provide excellent training in vocational skills. The CoVEs appear to have been based on the concept of specialist schools and spawned in turn, the centres of excellences in teaching and business links as proposed in the HE White Paper. But the impact of these 'specialisms' on the institutions as a whole is not yet clear. A Learning and Skills Development Agency (LSDA) report on colleges for business suggested that CoVEs have had little impact on the operation of the rest of the college. There is a consensus in the HE sector that the centres of excellence will carry little weight while the RAE continues to dominate funding and university activity (see Chapter 4).

Colleges have been appointed as the main provider of the Foundation Degree – one of the Government's key instruments for diversifying HE provision and expanding the numbers in HE. The Government has also encouraged a broadening of the range of education and training providers within the scope of public funding. It is proposing to bring in private providers (both for-profit and voluntary) in the LSS who have something distinctive to offer and to expand the work of others who already receive public funding to deliver a wider range of training.

It is widely thought that the Government will put weight behind greater segregation for 16 to 19 year olds facilitated by the recommendations of the strategic area reviews conducted by the local LSCs who are assessing patterns of post-16 provision in their areas. Some will be wary of institutional change but others will argue the advanced diploma as proposed by the Tomlinson review (DfES 2004) should be implemented through an expansion of sixth-form colleges.

The rationale underpinning the Government's emphasis on diversity:

- Diversity will increase quality and efficiency. Any institution in the private or public sector cannot be 'all things to all men' and should concentrate on its strengths to achieve excellence. Institutions should channel their resources towards a sharply defined mission whether a university or a LSS provider.
- Increased number and diversity of providers will promote competition and choice and therefore raise quality and fulfil the 'customers' demands in HE and the LSS.

- A concentration of research activity and funds in HE will lead to better infrastructure, better collaboration within and between disciplines and better pay for excellent researchers. Consequently the UK can meet the increasing challenge of international competition with regard to research.
- Government aims to raise the quality of teaching by incentivising HE institutions to lay greater emphasis on teaching. It is also thought that specialisation will lead to better teaching in the LSS.
- Similarly Government wants to encourage some HE institutions to focus on fostering closer links with business and community and this is also the key rationale for CoVEs.

Objections to more diversity

- Diversity entrenches hierarchy and elitism. Some fear that any explicit differences in price or activity between institutions inevitably encourages value judgements and confirms any implicit hierarchy. For example, it is thought by some that a system without differential fees at least gives low to middle ranking HE institutions the opportunity to become and be considered as good as the prestigious universities. However, the fact that providers in the LSS have been charging differential fees for a long time is often overlooked.
- Many in the HE sector agree with David Watson's view that the 'reputational range' of institutions should be limited to ensure the 'UK brand' is not compromised. He argues that the admittance of teaching-only or corporate universities to the 'fold' of the UK university risks undermining confidence in the high standards of UK universities as a whole (Watson 1998). By contrast it is not clear there is a 'LSS brand' or indeed whether this should be a cause for concern. It may be argued that a coherent 'brand' is more important for HE institutions that are more reliant on attracting overseas students.
- 'If it ain't broke, don't fix it' – many particularly in HE cite success of UK HE institutions in terms of high student satisfaction, high completion rates and a high number of research citations. However, there are concerns about completion rates and low post-16 staying-on rates in the LSS.
- Issues of mobility – lack of proximity or mobility should not limit choice. This has been a controversial issue particularly in the debate on specialist

schools. Many parents claim that they do not have easy access to the school of their choice – they have to send their child to the local school which happens to specialise in technology when she actually excels in modern languages. Similar issues might apply in 16 to 19 LSS provision. The problem is less pertinent to post-19 education as older students are more mobile or can relocate to be near the college of their choice. However, an increasing number of students are staying at home for financial or cultural reasons. There is also a growing tendency for young (under 25) childless HE students to live at home which may partly be due to the increase in ethnic minority students. 16 per cent of students studying outside London lived at home in 1998/9 compared to 19 per cent in 2002/3. The increase is more marked in London: with 27 per cent living at home in 1998/9 and 39 per cent in 2002/3 (Callender 2004). It is important that if students are unable to move they can still access a course which suits their needs.

- Some claim that the view of further and higher education implicit in the government's approach and enshrined in 'diversity' is utilitarian and focused on the demands of the labour market. It does not value the other qualities that an experience of further and higher education is traditionally supposed to nurture.

Conclusion

If and when the government hits its 50 per cent target for the participation of 18 to 30 year olds in HE, it is estimated that an additional 250,000 students will be studying in HE. The Government intends that the majority of those extra students will be taking foundation degrees in FE colleges. The long term pressures for HE expansion may continue, possibly to well beyond 50 per cent of under-30s as suggested by the new director-general for HE, Alan Wilson. This policy will accelerate the blurring of the HE/FE divide promoted also by the increasing diversity within both sectors. Despite government reluctance, pressure will increase to adopt a more integrated approach to the LSS and HE and the distinction between the two sectors in public policy will become more untenable.

The diversification of the student population is also perceived to be a challenge by many in HE. If the government succeeds in widening participation in FE and HE, institutions and academics will have to accommodate the different needs of non-traditional learners either in terms of socio-

economic background or prior attainment (with a high correlation between the former and latter). Students with lower prior attainment will need more support with study skills and in making academic progress. Tutors have also recorded an increase in discipline problems in lectures which has been attributed to larger staff: student ratio and students who are less capable of independent study (THES 2003c). However, it could be argued that the LSS has traditionally had to cope with a diverse student body.

The new differential fee system in HE poses several challenges to institutions although the relatively low cap on the fee level will ease the transition to a more market-based system. It is probable that students will become more demanding 'customers' placing institutions under greater pressure to justify their increased contribution and less tolerant of under-performance. This may be compounded by what some have identified as an increased 'customisation' of British culture. People are used to greater choice and products tailored to their needs and will expect the same from education. But differential fees have long been a feature in the LSS – this sector already deals with demanding customers including employers.

Many commentators have painted scenarios about the globalisation of higher education envisaging the explosion of the international market and the encroachment of major universities on the UK market. These scenarios are almost certainly exaggerated as the slow uptake of online courses indicates. Nevertheless there is an increase in the diversity of providers in both the LSS and HE and traditional institutions must respond to greater competition (see Chapter 2).

Any policy framework which promotes diversity must overcome the objections and enable the system to rise to the challenges outlined above. It must determine the limits to diversity and the balance between specialisation and universality, competition and collaboration, market forces and state intervention, central prescription and bottom-up change. It must also be informed by a clear vision of the purposes and objectives of FE and HE – many argue that this framework was notably lacking in the HE White Paper. The following chapters will examine which activities should be a core requirement for all institutions and which should be considered a specialism; how far the sector would benefit from a greater diversity of providers and how the disadvantages of specialisation can be overcome to ensure diversity is compatible with equality.

2 Diversity...teaching

Institutions in the LSS are generally more responsive to student need and place greater emphasis on teaching than HE institutions. There are several reasons for this: the most obvious is that far fewer staff in LSS institutions are involved in research. These institutions have also been more subject to the discipline of the market after incorporation in 1993 than their HE counterparts. The rationale for granting independence to colleges in 1992 was to create a more entrepreneurial, competitive environment in FE. Institutions are used to having to respond to the demands of students and employers. HE on the other hand has been 'protected' from the full rigours of the market by the fact that until 1998, students paid no fees and a significant proportion of the revenue of many research-intensive institutions came in the form of research funds directly from government.

The Labour Government set out its plans to further increase the demand responsiveness of FE colleges in the White Paper *Learning to Succeed* (DfEE 1999). The Learning and Skills Council (LSC) can fund any provider of validated courses and gives no sign of privileging FE colleges. The LSC has no particular brief for colleges, in its title or its responsibilities. Indeed, the head of the Adult Learning Inspectorate is on record as saying that some employers offer the best quality training in their sector and – by implication – could be funded to provide for those they do not employ (*Guardian* 2001a). Colleges will, in theory, have to compete on a level playing field with private training providers.

FE also has a tradition of catering for students with low prior attainment and who often come from lower social groups and need more supportive teachers. Teaching in many FE institutions scored even higher than in comparable courses in HE institutions (see below).

However, despite market pressures, there are many ways FE colleges could respond better to student need and improve their teaching. Sir Anthony Greener, Chair of the QCA, has argued that even now 'parts of our educational systems seem to be provider led rather than consumer or learner led' and had learnt little from the strengths of a customer focused business model (Greener 2004). Colleges may be ahead of their HE counterparts but the LSS still cannot equal the level of responsiveness demonstrated in Australia where courses can be designed and implemented within a matter of weeks. Colleges have been collaborating productively with employers and the University for Industry (UFI) is focussing on ways of tailoring learning programmes more precisely to the needs of the employer. But progress is slow and enrolment is still restricted to certain times of the year.

There is also a tension in government policy between the use of the market and the role of planning. Having laid the conditions for a greater market in the LSS, clear vestiges of planning appear in the definition of the role of the 47 local LSCs. They are expected to identify skills needs and 'plan' provision accordingly. They are also undertaking strategic area reviews and assessing the need for organisational change in patterns of provision.

Many universities, particularly in the Russell Group are accused, with some justification, of ignoring the needs of students either in the courses and modes of delivery they offer or the importance they attach to teaching. According to one practitioner, the priority of academics is publishing and of universities meeting the targets set by the government, their paying customer (Palfreyman 2002). There seems great reluctance, even in the dawning age of the empowered student consumer, to move from a producer-oriented provision of HE to a customer-oriented provision. Few British universities are organised primarily to serve students' needs, and teaching is rarely a core competence.

For example, the traditional pattern of three terms punctuated by the Christmas and Easter vacations and a lengthy Summer vacation persists despite the fact that an accelerated two-year degree course using the summers as teaching time could answer the needs of those for whom the opportunity cost of another year of student loans and of lost earnings is too much. Not all academics need late June to late September to do 'research' as many are not 'research-active'. There is scope for the US model of the nine-month contract, with the option of the academic taking on extra paid duties to teach Summer modules or finding a party willing to buy his or her Summer research or consultancy capacity. In order to make the academic year more flexible, the Government could encourage institutions to adopt this model. Some universities have introduced a February enrolment opportunity under the pressure of declining student numbers.

Despite years of debate about the merits of a Credit Accumulation and Transfer system, no comprehensive credit framework has been devised for the HE sector. The US had operated a credit system at state level for some time and the benefits to the student and employer are clear (see Piatt and Robinson 2001). Despite the Government's backing of the proposal in the HE White Paper progress is still slow. This may partly be due to reluctance of institutions who do not welcome the uncertainty and fluidity of student movement such a framework would probably entail. The Government should also put greater momentum behind the proposals to establish a

comprehensive credit accumulation and transfer system as means to make the system more flexible and accommodate the needs of non-traditional students. A truly flexible curriculum in HE and the LSS comprised of bite-sized chunks would also limit the costs of making the wrong choice as students would be able to change courses with minimal disruption and financial penalty. Adult learners, a prime target group for recruitment in the LSS and HE, would be better served by a system of credits together with better arrangements for credit accumulation and transfer.

The main objections to a more credit-based system include the idea that learning would become like a trip to the supermarket where courses are taken off the shelves in no particular order and with little thought to the overall package. However, with access to comprehensive advice and guidance, students can be empowered to construct their own learning programmes and consequently feel more committed to their success (see Piatt and Robinson 2001).

Pedagogy is still not taken seriously in HE despite the decision to allow academics interested in research into teaching to submit their work on an equal footing with other researchers in the 2001 RAE. Previously, pedagogic research was almost wholly assessed by education panels. This was thought to be a significant disincentive to spend time and money on pedagogic research which, as a consequence, was badly sidelined. But many academics interested in pedagogy such as Roger Brown, principal of Southampton Institute and Stephen Rowland, director of Sheffield University's higher education research centre, believe this move still did not provide enough incentives to persuade the big research universities to give more emphasis to teaching.

The Institute for Learning and Teaching in HE was established in 2000 to encourage academics to place greater importance on teaching but it is widely viewed as unsuccessful in achieving this aim and it is due to be dissolved in 2004. There is hope but also some scepticism about the new academy for HE which is effectively to take its place later in 2004. The proposal of the Higher Education Funding Council for England (HEFCE) to make subscriptions to the academy compulsory have been interpreted as a signal that institutions are not too keen to join. The key reason for this lack of enthusiasm, according to many practitioners, is that research-intensive universities do not want to be distracted from research and that career progression for academics still depends on their record on research.

However, some institutions, particularly amongst the Coalition of Modern Universities, have adapted to student needs and placed greater

importance on effective teaching and learner support. The Open University and the University of Phoenix in the US are good examples of institutions which have identified and defined their mission as serving their key clientele. In both cases supporting adult learners constitutes their core mission.

The Open University is widely imitated overseas for its innovative business model, multidisciplinary course development and tutor network. But its core value has been simply helping learners to learn. In many ways, Phoenix is very different; it seeks a profit, has no research capacity and invests less in course development. But it lays significant emphasis on pedagogy, offers classes at convenient times and quality-controlled teaching in vocational subjects from practitioners – needs which were not being met by state universities. The fact that these institutions are fulfilling a need is evident in substantial growth in their student numbers, with 200,000 at the OU and 120,000 at Phoenix, and the healthy profit that Phoenix is making.

More universities should have teaching and student needs as mission focus

The success of institutions like the Open University and Phoenix indicate that there is a demand for a sharper focus on the needs of certain groups of students. But how far does this apply across the sector? If some institutions do not feel this is their appropriate mission, how far should they need to adapt more to the needs of students and raise the importance they attach to teaching? What is the core requirement or the acceptable minimum and how best is this to be achieved?

The role of the Quality Assurance Agency (QAA) is to assess and enforce standards of quality in teaching in HE and the 2003 White Paper on HE has proposed ways of raising the status of teaching. It envisages that all new lecturers will be accredited by the new HE academy from 2006. Centres of teaching excellence status are designed to incentivise departments to concentrate on developing excellent teaching skills. But many consider that the relatively small pots of money allocated for this will have little effect in the face of the rewards offered by research.

Differential fees

Arguably the most effective way of increasing the importance of teaching and the learner-responsiveness of institutions is by creating a more market-

based system, as proposed in the 2003 White Paper. Increasing the contribution made by the full-time student and allowing institutions to charge different prices should make students more demanding and less tolerant of sub-standard teaching. (It is always worth reiterating the fact that part-time and overseas students have been paying differential fees for years). When the charges for overseas students increased substantially in the 1980s and early 1990s many Vice-Chancellors (including those at the most prestigious universities) noted an increase in the demands of these students for example in relation to the opening hours of libraries and the quality of their stock (these arguments and the ippr proposals for reforming the student finance system are set out in more detail in Piatt and Robinson 2001).

Unfortunately the cap of £3000 on the price universities are permitted to charge will mean there will be little differentiation between institutions. Approximately three-quarters of HE institutions have declared their intention of charging the full £3000 for most courses. The low cap was a sensible compromise in view of the political hostility differential fees arouse and the fact that both the sector and the public needed time to adjust to this move to a more market-based system. An initial cap on fees was also one of the ippr proposals for a reformed fee system (Piatt and Robinson 2001). But a more differentiated system in the longer term has the potential to further empower students. It could incentivise an institution to justify charging a higher fee than its neighbour by providing better facilities and high-quality teaching.

Some question the price elasticity of demand for courses in HE. The most prestigious universities could afford, it is argued, to effectively ignore the demands of students. Some funds would be allocated to student services but most of the extra revenue would be siphoned off into research and students would see no improvement for their increased contribution. The less prestigious universities are more responsive because they have to 'recruit' rather than 'select' students.

There is some truth in this. Students chose Oxbridge because of its status and tradition not primarily because it employs talented teachers who impart information in effective and imaginative ways. But this is, in many ways, a rational decision. The most prestigious institutions have acquired their status largely on account of their research profile and the leading academics they attract and this increases the 'value' of the degree in the labour market (Conlon and Chevalier 2001). It is also the case that most of the students who apply or are accepted have higher prior attainment and more

developed independent study and learning skills and cognitive ability which means that their teaching requirements are different from their peers and they demand less intensive support. The link between prior attainment and the need for extra teaching support is now acknowledged in the widening participation premium given to HE and FE and is a more accurate way of assessing the need for additional support than socio-economic background, although there is a high correlation between disadvantage and low prior attainment. This does not mean that students with a high points average do not need effective teaching. But it does mean that students have different needs and priorities. A more market-based system will reflect those needs.

This distinction between low prior attainment and socio-economic background (despite the correlation) is important in considering the issue of a mission to widen participation or cater for particular socio-economic groups. It is more appropriate to focus on the teaching needs of 'non-traditional' students and those with low prior attainment than on disadvantaged students *per se*. There is also a danger that if some institutions are perceived to be focusing on widening participation, other universities will fail to perceive a commitment to ensuring fair opportunities to all students as integral to all institutional missions.

Claims that differential fees will lead to social polarisation of universities, entrench elitism and adversely affect the participation of those from the lower social groups in HE are not based on evidence. The key determinants of participation in HE and the type of university attended is prior attainment, not financial circumstances or background. The statistics show that once a student from a working class background has obtained the requisite A levels she or he is highly likely to go to university (see Piatt and Robinson 2001). Moreover the student support package and deferred payment of fees scheme proposed by the Government adds substantial safeguards against any student being deterred by higher fees at any institution. The little differentiation in price as a result of the low cap will also mean that there is little likelihood of the new fees system leading to greater social polarisation.

Evidence from the US and New Zealand also suggests that greater social polarisation is not a consequence of a system with no cap in place. For several reasons the New Zealand model should not be replicated but it does demonstrate how full deregulation of market led to a flourishing of new and diverse providers and courses and an increase in the participation rate

of students from poorer backgrounds. Australia provides the best example of how the introduction of a moderate variable fee system has not presented any barriers to wider participation. However, international evidence, whilst helpful, cannot be relied upon as an indication of the impact of a differential fee system in England. The present cap on fees should therefore be lifted only if the Government's proposed review of the system indicates that there have been no unintended or adverse consequences particularly with regard to the participation rates of students from low socio-economic backgrounds.

Teaching-only universities

Similarly a more market-based system will facilitate the increase in institutions with a mission to focus on teaching if there is a demand for them. Several institutions have effectively declared their mission to be teaching. London South Bank University identifies its mission as 'top-quality teaching underpinned by relevant research'. The issue of teaching-only institutions is controversial largely because institutions fear that the government will withdraw funding for research from certain institutions. This concern tends to detract from the merits of the idea of a teaching-only institution.

One of the most contentious questions arising from the debate on diversity is whether research is integral to the idea of the university. Those who argue that research activity is central to university life make various claims.

- Some argue that the quality of teaching is enhanced by the fact that the lecturer is engaged in research not only in terms of imparting knowledge at the cutting edge of her subject but also in communicating a spirit of investigation and excitement in exploring new areas. There are also the practical implications of having supervisors who are able to advise doctoral students.
- Another key claim is that research is a fundamental aspect of the academic profession. Deny academics the right to research and they will simply move elsewhere and recruitment of academic staff in teaching-only establishments will become well-nigh impossible.
- According to David Watson, Vice-Chancellor of Brighton University, teaching-only universities would debase the currency of UK institutions worldwide.

However, these arguments are not entirely convincing. There is little evidence of a link between research and teaching. The arguments relating to this topic are well rehearsed elsewhere so they will not be revisited here (see Brown 1999; Court 1998 and Zaman 2004).

It is, however, important to make the following points. There may well be a correlation between the most effective researchers and teachers, as claimed anecdotally by Vice-Chancellors. But the link is not necessarily causal. Highly capable people often excel in various fields and equally, many graduates could cite examples of star research staff who are not the most inspiring lecturers.

A 'scholarly environment' is essential for genuine higher education, as David Watson claims (Watson 1998). Academics should command a high level of 'scholarship'; they should be aware of the latest developments and be up to date with cutting-edge thinking. But it is surely unnecessary for a lecturer to be actively engaged in primary research in order to provide high level teaching. Previous experience of conducting research should enable him to supervise doctoral students. Scholarship also distinguishes the academic from the teacher who is not expected to be up to speed on latest developments. It may even be to the benefit of students to have lecturers who are not distracted by research. According to Anthony Barnett: 'in some respects, the research culture can have deleterious effects on the teaching process' (Barnett 1990).

Many academics would prefer to focus on teaching or at least are more interested in teaching than research. A survey of staff in pre-1992 universities found that while 53 per cent of permanent staff said that their interests lay primarily in research, only 33.5 per cent of fixed-term staff agreed. It is likely that this figure would have been even smaller if all universities had been taken into account (AUT 1997).

Moreover, an academic working in a teaching-focused university need not be excluded from research. They should be able to participate in research at regional centres perhaps based in departments which scored highly in the RAE. Such centres would provide a focus and locus for research active staff who could be seconded from institutions throughout the region.

The idea that the 'UK brand' will be tarnished by the teaching-only universities and the UK's standing in the international market may give ministers pause for thought but the objection is predicated on a low estimation of the ability of overseas students and their parents to make judgements

about British universities. Even if teaching-only institutions were considered inferior, it would be misguided to assume that overseas 'customers' could not recognise that they differed from more traditional institutions. The prestige of the French 'Grandes Ecoles' and many US liberal arts colleges has not been undermined by the fact that they are not research led.

The teaching-only university does not undermine the 'integrity' of the university if key conditions are observed.

- Academics should have the opportunity to pursue research interests in other institutions or research centres.
- The decision to focus on teaching must be made by the institutions itself, not imposed from above (see below).
- All academics must honour the commitment to scholarship.

Corporate universities – bonus or threat?

The corporate university constitutes a further challenge to the notion of the university. Few corporate universities conform to the principles of a traditional university – a broad range of subjects, leading to all levels of degree qualifications and available to all those qualified to benefit. Most focus on particular subjects, none provide their own range of degrees or conduct research and most do not provide access for all staff. Many are virtual, like Heineken, that is the courses are all online. There are some 1,600 corporate universities in the US, including those at Motorola, IBM and General Motors, and several in the UK, such as the Unipart University and the Cable and Wireless College. The Government's relaxing of the university title rules would probably lead to more corporate universities in the future. The NHSU, a vehicle for NHS staff to acquire new skills and progress in their career is due to be in full operation by 2008. The NHSU will have a 'physical presence' but many courses will be online. Ministers have stressed the importance of gaining university status for the NHSU.

Some believe that the rise of corporate universities represents an adulteration of the idea of the university. It is feared that like teaching-only institutions, they would dilute the international reputation of UK universities and encourage the so-called McDonaldisation of higher education. Some of the hostility is motivated by fear that the corporate and virtual institutions will poach students from the traditional universities. Indeed in the US,

Community Colleges are being challenged by certification programmes in corporations and for-profit organisations which have started to offer their educational services to a wider cross-section of society.

However, corporate institutions do seem to be answering a demand from employers and employees as their growth indicates. To some extent, this reflects the weaknesses of many HEIs in engaging in work-based learning. They may provide some healthy competition for the universities, but the size of the threat they pose is often overstated. Most corporate institutions have to collaborate with conventional interdisciplinary academic institutions to provide tailored courses and use resources or premises. This desire and need to collaborate also applies to institutions like the Arthur D Little Business School in the US which has gained the power to award degrees. The NHSU has also expressed a clear intention to work with a 'rich mix' of academic institutions with Warwick University the key partner.

Similarly predictions about 'globalisation' in the form of the rise of the virtual university or the encroachment of online courses offered by big institutions appear to have been exaggerated. Despite the fanfare accompanying MIT's launch of online courses, relatively few are on offer. The Open University's recent decision to close its North American operation also suggests the limitations to the demand for distance learning. The problems besetting the UK's flagship online university venture are even more telling. The UKeU has attracted 900 students in total. Its target for the first year alone (2001) was 5,600. It has raised £4.5 million selling degrees online, but had been expected to make enough money to match the £62 million of public cash it received from HEFCE. There is still clearly an important role for traditional 'classroom-based' learning. Many students continue to demand a more personalised form of learning and the additional benefits that membership of an institution can bring.

As most of the courses that the NHSU will provide will be online, it remains to be seen whether it will achieve its goal of helping NHS employees acquire more skills, particularly at the lower level. The government estimates that some ten per cent of the 1.5 million people working for the NHS would need help with literacy and numeracy. Certainly the aims of the NHSU are laudable. The medical profession is dominated by the higher socio-economic groups and the NHSU may help in opening up the profession to those previously excluded. But the magnitude of the challenge should not be underestimated.

HE in FE

The debate on teaching-only universities often overlooks the fact that 11 per cent of all HE courses are taught in FE colleges by lecturers who are not usually engaged in research. The idea that a move to teaching-only institutions represents an entirely new development clearly does not reflect the reality. There is a wide variation in size and pattern of activity across the 360 FE colleges that offer HE courses. This provision is almost wholly a result of historical and local circumstances in response to student demand rather than planning.

Like most teaching-only institutions, mixed economy colleges also perceive their key clientele for HE provision as non-traditional students – those most in need of support and encouragement. Colleges claim that they have a greater understanding and experience of supporting non-traditional students than even new universities. These claims are largely borne out by the QAA assessment 'Learning from higher education in further education colleges in England' (QAA 2004) and a study of mixed economy colleges by KPMG (KPMG 2003). Despite the misleading headlines claiming that the QAA had severely criticised HE in FE, the report highlighted the real strengths of the approach.

- The colleges make an important and growing contribution to the achievement of the Government's policy for increasing participation in HE. The colleges are effective in creating flexible educational opportunities for a range of students who have not traditionally been able to benefit from HE. The programmes are successful in attracting students from widely differing backgrounds, with diverse qualifications, a broad age profile and varied educational and work experience.
- There are good rates of progression from FE to HE within mixed economy colleges.
- A crucial element in the success of the colleges' HE provision is the quality of student support. In most cases, student groups are small, providing very good opportunities for close working relationships between staff and students. Staff know their students well and play a key part in helping them through the challenges of balancing learning with work and domestic demands. Staff are generally well qualified in their subjects and in the practice of teaching.
- College staff usually build on their links with employers to support their HE provision, promoting relevance to employment and currency of the curriculum.

- Colleges that have achieved a Centre of Vocational Excellence (CoVE) status for their FE-level provision are able to use their specialist facilities to benefit HE students.
- A key strength of most programmes is the opportunity for students to combine study for an HE qualification with relevant employment, particularly through part-time HNCs, and work-based projects and placements. Indeed, HE in FE has a clear role to play in rooting HE in industry and in developing partnerships with key local organisations which is one of the government's key aims.

However, others claim that HE should not be delivered in FE due to lack of facilities and research staff and that this constitutes mission drift. Moreover, following incorporation the then Further Education Funding Council was determined to prevent any dilution of the mission of colleges and was content to transfer responsibility for HE to HEFCE. The lack of coherence and consistency in the Government's approach to FE and HE in terms of funding and quality arrangements have posed major difficulties for colleges reviewing their current and future investment in this level of provision. There are considerable difficulties in working with two quality assurance systems. Certainly mixed economy colleges, as designated FE institutions, are ineligible for many HEFCE funded initiatives and have only limited access to capital funds for HE provision. They also received £1000 less per student than HE institutions in 2003/4 when funding per full-time student in colleges was about £5,000 compared with £6,000 at universities. Some claim that this comparable lack of resources is responsible for some of the quality shortcomings identified by the QAA and other studies. Of 153 inspections carried out in colleges, the QAA found 40 per cent of courses had problems with student retention and a third of libraries and half of engineering equipment needed updating.

Many mixed economy colleges now undertake a significant amount of provision for 14 to 16 year olds and this level of provision may increase. There may be strategic problems in providing large scale HE provision at the same time as providing an increasing range of provision to 14 to 16 year old students. There is a real danger that colleges lose sight of key mission in providing HE. For some colleges, HE delivery needs to be seen as a clear strategic role with mechanisms in place for a seat at the policy table. Otherwise HE in FE will continue to be marginal and under-valued within

FE. There is clearly a role for FE institutions in providing HE but the mission focus must be ensured.

The government's policy of delivering most foundation degrees through FE institutions will further compel colleges to define their mission. Indeed there is a strong case for colleges (subject to quality assurances) to award as well as deliver Foundation Degrees rather than have to depend on HEIs to validate the course. The suitability of the Foundation Degree as the main vehicle for HE expansion has been discussed in detail elsewhere (Piatt and Robinson 2001). According to Parry and Thompson it is in some ways ironic that the least well-understood parts of HE and among the lowest areas of growth in the expansion of HE should be chosen for such a key role in achieving government policy (Parry and Thompson 2002). There is also uncertainty over the real level of demand from students and employers for a new sub-degree. But demand has been high for certain courses such as equine studies and engineering related programmes which specifically fill a gap in the market and courses leading to jobs in the public sector like teaching assistants.

The modifications made to the Foundation Degree in the HE White Paper certainly serve to increase its chances of success. The decision to loosen the criteria for the Foundation Degree qualification enabling the survival rather than the termination of the HND is a positive development. The introduction of a differential fee scheme also makes the Foundation Degree a much more attractive option, if as the government predicts most institutions charge considerably less for the Foundation Degree in comparison to the standard honours degree. The Foundation Degree may succeed in raising the status of vocational sub-degree qualifications and increasing their currency amongst employers. It may even attract more students particularly from non-traditional backgrounds to progress to HE. Most importantly it may increase the pressure on the government to reconsider and justify any disparities in funding of HE in HE and FE institutions and adopt a more integrated strategic approach to the whole post-16 system. For the Foundation Degree to work, it must gain the approval of both employers and universities, and there are still concerns that employers are not being fully engaged with the development of the Foundation Degree both at the governmental, local and institutional level.

Specialisation by age in the LSS

There is very little evidence of the benefits or drawbacks of segregating students according to age as a major study for the LSDA on age mixing in FE

has found (McNair *et al* 2004). This is partly because the performance data is difficult to interpret. FE colleges and the sixth form colleges with which they are often compared do not have comparable intakes.

Some government advisors and ministers have, in the past, expressed a preference for sixth form colleges. The Government's diversity agenda lends itself to greater specialisation by age as well as subject and activity. Many also perceive a trend towards segregation which may be accelerated by the proposals in the Skills White Paper (DfES 2002b) and a range of government initiatives such as area reviews. The Association of Colleges anticipates that separate 16 to 19 provision will be the preferred option emerging from the Strategic Area Reviews currently being pursued by each of the 47 local LSCs across England. However, the Tomlinson recommendations of a 14 to 19 structure would not be best served by 16 to 19 provision. Moreover, the number of 14 to 16 year olds in FE colleges has risen significantly since the government set a target in 2001 for colleges to cater for 40,000 pupils in this age group. Already more than 100,000 14 to 16 year olds were being taught in colleges in 2003, with that figure expected to rise to 120,000 during 2004.

Advantages of tertiary and general FE

It is claimed that sixth form colleges achieve better academic results. There are undoubtedly many admirable colleges which consistently achieve impressive academic results. But an LSDA report in 2003 found that although sixth form colleges generally have higher rates of retention and achievement, this largely reflects intake. One of the report's key conclusions was that 'the large majority of sixth form colleges perform at least adequately in the progress that their students make at Level 3. In the lower quartile, though, the data suggests that value-added performance should be notably better than it is at present – especially in the ten per cent or so of colleges with the lowest value-added scores' (Davies 2003). Many colleges have one or two subject areas where value-added performance is persistently lower than others in relation to the national profiles for the subject areas concerned.

Research conducted by the Responsive College Unit 2003 has also shown that 16 to 18 year old students in tertiary colleges 'have higher achievement rates than sixth form college students at all levels above entry level', ie at levels 1, 2 and 3' (Responsive College Unit 2003). The essence of a tertiary structure is that schools within a given area do not operate sixth

forms, but instead young people progress to a single local institution that provides both their 16 to 19 education and provision of adult learning for the wider community.

The research also shows in-year retention rates for tertiary colleges are comparable with those for sixth form colleges, despite the tertiary colleges' much wider curricula, and are far ahead of those for general FE colleges. Tertiary colleges also have better retention rates with entry-level students, who come in with no qualifications, and have 'considerably more success' than the general or sixth form colleges in encouraging these students to stay on in learning for subsequent years.

The research found evidence that the tertiary colleges are more successful than the sixth form colleges at encouraging young students whose initial highest ambition is a level 2 qualification – five GCSEs at grades A to C, or their equivalent – to progress to higher study. On top of this, tertiary colleges offer on average double the curriculum range that Sixth Form Colleges do.

There are several factors which might account for the success of tertiary colleges:

- Tertiary colleges tend to have a higher socio-economic intake than general FE colleges
- According to one college principal, tertiary colleges are more effective than sixth forms or sixth form colleges, in rewarding practical skills. Students with practical skills do not receive the same encouragement and praise in sixth form colleges where the focus is still on academic attainment.
- Tertiary colleges offer a far broader curriculum – a combination of academic and vocational opportunities which so many young people cannot access in other circumstances.
- General FE or tertiary colleges can also acquire superior, expensive facilities. For example, the City of Bristol College claims that A level students benefit from hi-tech equipment funded by HE students.

These arguments are to some extent substantiated by the report on mixed age teaching cited above (McNair *et al* 2004). The research indicated a large majority of managers in colleges believed age mixing had positive effects on motivation, achievement, social development and classroom management. Most staff found mixed-age groups easier to teach. Even the young people

preferred an adult environment because they were compelled to behave better and felt they learnt more as a result.

However, the results of this research are not wholly convincing or conclusive again largely because robust empirical research was impossible and the findings depend on qualitative research – interviews with teachers and students in general further education colleges. The researchers acknowledge these restrictions and the fact that the study can only concentrate on the benefits of mixed age learning and not address the advantages of segregated classrooms. The latter may, in fact, outweigh the former.

Sixth form centres

Sixth form centres are segregated areas within general FE colleges dedicated to provision for 16 to 19 year olds. LSDA research on these centres identifies the benefits of segregated provision. According to staff these centres 'provide a safe and secure environment in which dependent school leavers will be able to grow into independent adults' and they are in a friendly 'family environment where they will be known, supervised and cared for'. One of the main concerns about general FE colleges is that their large size makes them impersonal and intimidating for younger students. Sixth form centres also appeared to have a positive impact on educational outcomes – a sample of colleges with sixth form centres show better than expected results in terms of A level averages and acceptance for university. Again, however, the data is inconclusive and there is no evidence of a relationship between the size of the college and success rates in terms of achievement and retention.

Evidently these are some factors that made sixth form centres attractive to students and parents. Most sixth form centres were established in response to competitive pressures, rather than planned and they have succeeded in improving recruitment and retention. There has consequently been a growth in their number. However, many students may also be attracted to the fact that sixth form centres provide the best of both worlds – the opportunity to mix with adults in the main body of the colleges, share social and recreational facilities and to leave behind a school-based ethos and setting that may carry negative associations. At the same time, they provide the focus on the needs of the 16 to 19 age group. In many ways then sixth form centres are an ideal compromise – they are also a swifter, more flexible response to student demand than more fundamental structural change.

Sixth form centres could also be an effective vehicle to accommodate the growth of 14 to 16 year olds in colleges. Colleges appear to have played

a successful role in motivating 14 to 16 year olds disaffected from school. For example, in 1998 Bedford college began a Way to Work programme, designed to provide vocational options to school 'refuseniks' and disaffected pupils. The Way to Work (W2W) project involves a mixture of college attendance and work-based experience, with pupils spending a maximum of one day a week at school. Its effect on individual pupils was immediate, in terms of attendance, behaviour, and performance – so much so that many colleges throughout the country have introduced similar schemes. The effects on Bedford's performance have also been dramatic. The college's overall success rates have doubled over a five-year period, from 42 to 85 per cent of all students achieving the qualification they were aiming for. Around 75 per cent of the pupils on the W2W project progress to other college courses, modern apprenticeships, or go back to school at 16.

With colleges playing an increasingly key role in provision for 14 to 19 year olds, the Government should treat colleges and schools equitably in terms of funding. A funding gap of ten per cent exists between colleges and schools for the same work in meeting government targets in the 16 to 18 age group. It is also unfair that schools are given all the credit for improvements made by 14 to 16 year olds who study part of the week at colleges.

Until the evidence is clearer, the Government should be wary of prescriptions for organisational change and promote flexibility to adapt to local market conditions. Centres within larger institutions are not an easy option. They require very competent leadership and 'robust devolution' of authority to the heads of the centres to work effectively. Despite its potential for flexibility in meeting local need, they also demand very focused institutional mission to ensure that the 'centre' does not become a disconnected entity within the larger institution. However, this structure also makes more economic sense than segregated provision in that courses that are capital intensive are not restricted to certain groups of students. The 'centre' approach does seem to have enjoyed success in catering for specific age groups and subject specialisms and demands more consideration as a way of promoting specialisation whilst retaining the benefits of the general FE college.

Conclusion

A growing student population with an increasingly varied set of educational needs requires an increasingly varied range of institutions – large and small, multidisciplinary and specialist, research-led and teaching-led, some

catering for students with conventional qualifications, others for students without them, some primarily residential, others operating largely in distance mode. These needs will be less likely to be met in a single, multi-mission institution because of the difficulty of balancing different missions and the tendency in HE for one academic culture, based on the notion of disciplinary research as the highest form of academic activity, to drive out or dominate others. Maintaining, and even increasing, diversity at institutional level is key to having a balanced further and higher education system.

A 'scholarly environment' is essential for genuine higher education but not all HE institutions should be expected to engage in high-level research. The Government should go ahead with proposals to relax the criteria for university status. Teaching-only or teaching-focused universities and colleges have a role to play in delivering HE. Academic staff at teaching-only institutions should be able to participate in research at regional centres perhaps based in departments which scored highly in the RAE. Pedagogy in HE should be taken more seriously and incentives offered by the criteria for centres of teaching excellence and more grants offered by the research councils. Differential fees should make HE institutions more responsive to student demand; and the cap on fees should eventually be increased to allow greater differentiation between institutions and empower students.

Government should be wary of prescribing organisational structures in the LSS particularly in relation to age segregation until more robust evidence is available. Local areas should be able to decide for themselves the mix of institutions that best serve the needs of the population and of employers.

Many institutions in HE and the LSS are still not sufficiently responsive to student and employer need. A credit accumulation and transfer system should be established covering both FE and HE. The Government should adopt a more coherent and consistent approach across the LSS and HE and follow the Scottish Executive in reconsidering the legal definitions of FE and HE. But the consequences of any move to merge the funding councils should be carefully considered.

3 Diversity...research

Chapter 2 set out the argument that research is not necessarily integral to the university mission and that good teaching is not dependent on active research. Indeed, good quality teaching in the LSS demonstrates this. Moreover, the fact that research is conducted in the LSS is often overlooked. However, this argument over the link between research and teaching should not be confused and conflated with the justification for a greater concentration of research activity in a smaller number of universities.

This Government appears to be reducing the amount of selectivity of research funding originally proposed. But the argument continues to exercise the HE sector and it is important to set out the principles which should underpin the distribution of funds in the face of preconceptions and vested interests.

Previous governments have attempted to achieve greater selectivity in allocating research funds for the following reasons: Developing a 'critical mass' of research activity is argued to be beneficial particularly in scientific research. Many international universities and departments, particularly in the US enjoy greater levels of funding for research so it makes sense to ensure that some institutions can compete and pay competitive salaries to the best research staff. For example, while Imperial College London received a total research income of £153 million in 2001/2, Johns Hopkins University in the US acquired just under one billion dollars (£566 million) in 2001. As public funds are limited, it is inefficient to 'share the cake too thinly'.

However, there are arguments for limiting the degree of selectivity. The evidence of a link between 'critical mass' or concentration of funds and improved research output is not clear. The argument may be logical for the sciences but is less persuasive with regard to other disciplines such as the arts, humanities and social sciences. The allocation of research funding is already more highly concentrated in the UK than it is in any other major country, including the United States (UUK 2003). A policy of selectivity carries the risk of ossification – new 'up and coming' departments with great potential could be bypassed. A dynamic system will depend on the opportunity for all departments to bid for funds. Some argue that greater selectivity would have prevented success stories such as the universities of Warwick and York. New universities receive relatively little research revenue but the receipt of this small amount plays an important role in attracting staff and encouraging departments to aspire to high-quality research. Some argue that transferring this amount to the research intensive institutions would make little difference to their output. It is also argued that ground-

Table 3.1 Distribution of income by activity type and by region 1999/2000 (£m)

	Teaching	FE	Research	Other academic services	Other	Capital Endowment & interest received	Total	% total UK income
East Midlands	416	19	161	41	102	10	757	6.0
Eastern	404	5	259	27	101	12	856	6.8
London	1305	26	716	129	407	47	2686	21.3
North East	274	1	101	27	74	13	495	3.9
North West	683	5	230	65	180	21	1208	9.6
Northern Ireland	150	0	57	12	28	4	255	2
Scotland	730	0	363	91	187	51	1449	11.5
South East	906	9	418	59	210	27	1696	13.4
South West	380	1	131	29	106	12	668	5.3
Wales	331	2	114	41	78	12	589	4.7
West Midlands	461	18	159	46	149	13	859	6.8
Yorkshire & Humberside	571	12	237	46	161	16	1055	8.4
Total	6612	98	2945	614	1782	238	12574	

breaking inventions or discoveries were made in departments which would be at risk of losing funds under a policy of greater selectivity.

Greater selectivity would have an impact on the regional distribution of research-intensive institutions. The table below demonstrates how research funding is already concentrated in London and the South East. The 'golden triangle' of London, Oxford and Cambridge would receive almost all funds and the East Midlands and Wales would be particularly hard hit. The West Midlands and Northeast would also fail to prosper. The consequences of depriving large regions of the country without research-led institutions must be carefully considered. This is the key reason why the Lambert review (Lambert 2003) advised against greater concentration.

Clearly, whatever its merits greater selectivity per se should not be an overriding objective. The rationale for the distribution of research funding should be to promote high quality research both academic and applied wherever it occurs. Any funding system must recognise and reward innovation and talent wherever it is found. If it is to be found predominantly in the Russell Group and funding is therefore concentrated on relatively few institutions then so be it. But concentration should not be engineered without robust evidence of improved outcomes. While the distribution of funds should not be determined by an attempt to ensure a 'fair regional spread', any system which leads to a significant imbalance in research activity across the country should be reassessed, not least because it contradicts Government policy. This Government has laid emphasis on the importance of the role of universities in the regional economy. A situation where academics and students would be effectively compelled to move out of their region and gravitate to the South would be undesirable and in conflict with Government's policy of reducing the concentration of economic prosperity in the South. This policy should also be informed by employers' views.

Of course some selectivity in research is necessary and desirable. Achieving the objective of promoting high quality research both academic and applied wherever it occurs given limited public funds and the need to allocate them most effectively is a tough challenge. Currently the dual funding system is the mechanism for distributing these funds. But the question of whether this system achieves the desired objective is contentious.

Dual funding – What is it?

Grants from the Research Councils such as the ESRC. Individual researchers or teams bid for these funds by submitting research proposals.

Grants from HEFCE according to the RAE for indirect research costs and infrastructure. The RAE is a periodic mechanism to determine the volume and quality of research in higher education throughout the UK. Institutions conducting the best research, as quantified by the RAE, receive the largest proportion of funding. Research is judged according to seven ratings (see below). Other countries that use mechanisms similar to the RAE include Hong Kong, Australia and Poland.

The RAE ratings system

- 5★ Levels of international excellence in more than half of the research activity submitted and attainable levels of national excellence in the remainder.
- 5 Levels of international excellence in up to half of the research activity submitted and to attainable levels of national excellence in virtually all of the remainder.
- 4 Levels of national excellence in virtually all of the research activity submitted, showing some evidence of international excellence.
- 3a Levels of national excellence in over two-thirds of the research activity submitted, possibly showing evidence of international excellence.
- 3b Levels of national excellence in more than half of the research activity submitted.
- 2 Levels of national excellence in up to half of the research activity submitted.
- 1 Levels of national excellence in virtually none of the research activity submitted.

The Research Assessment Exercise

It could be argued that the RAE was introduced in 1986 as part of the then Government's drive towards greater selectivity in the distribution of research both across the university system as a whole as well as within individual universities.

Many claim that the RAE has led to better management of research forcing universities to make more strategic decisions, investing in their strong departments and pruning away unproductive research. The result has been a significant improvement in research quality. With considerable emphasis on the importance of research in the present climate, it is easy to overlook the fact that research and researchers were not highly valued a generation ago. The RAE did stimulate research and research development in those institutions that had previously not considered it anything to do with their business at all. Some would argue, however, that it overshot the mark.

To date the funding councils have resisted the pressure to concentrate funds upon only a limited number of universities and the RAE has succeeded in being broadly inclusive despite disparities in levels of funding. Many objections to the reforms proposed in the Roberts Review are based on the potential for undermining the inclusivity which characterised the RAE. In addition, peer review which is central to the RAE is a popular vehicle for quality control.

Indeed, many academics, and particularly Vice-Chancellors, were broadly happy with the RAE – at least until the 2001 RAE. HEFCE's *Review of Research* (HEFCE 2000) claimed that 'consultation revealed a very strong response in favour of continuing with the RAE'. But this does not mean the system achieves the objective of promoting innovative and high-quality research across the system. The positive response to RAE seems to be motivated in many cases by a 'better the devil you know' mentality – many have now mastered the 'rules' of the RAE and how to bend them. One of the criticisms of the 2001 RAE is that the improvement in performance demonstrated by institutions was due to 'gamesmanship' rather than true merit. The results showed widespread and significant improvement in research quality. 40 per cent of departments submitted were awarded 5 or 5*, the highest ratings: 55 per cent of researchers who submitted now work in these departments. It is of course difficult to prove either way if this improvement was 'genuine' without additional forms of evaluation – the Education Select Committee investigated this claim and decided to give institutions the benefit of the doubt (House of

Commons 2002). Surprisingly and unhelpfully, no formal assessment of the RAE has been undertaken.

However, the consequences of the 2001 RAE were not popular amongst some institutions as the Government claimed there was no extra funding to reward these improvements. Academic departments had put in enormous effort and extensive investment to improve their ratings, yet most would see little benefit and some would lose money despite maintaining their performance. This has led to more questioning of the appropriateness of the RAE as a mechanism to reward and promote high quality research. This apparent loss of credibility highlighted some flaws of the system.

It is argued that the RAE now grants too much importance to research. According to the Royal Society which has called for the abolition of the RAE 'the RAE has now been perverted by many into a one-dimensional totem of the prestige of a university's departments, and ultimately of the institution itself. The RAE's status as a totem of merit, overshadowing equally important measures of teaching quality or general usefulness to local or regional communities or industries, is an unfortunate unintended consequence of a basically sensible idea' (Royal Society 2003). Because the rewards of the RAE are potentially so great, it is very difficult to incentivise other activities. Vice-Chancellors and academics are encouraged to 'play the game', rather than concentrate on delivering excellent research.

The RAE adopted a science model that did not fit some disciplines, and it operated a 'one-size-fits-all' model in relation to research despite the considerable differences between disciplines and the huge diversity between institutions in types of research carried out, employment patterns and sources of external funding. The Royal Society argued that in the early days it encouraged scientists to focus on the research they had long been meaning to do, but that it is now outdated and burdensome. There is an apparent bias against applied research possibly because academic benchmarks are clearer and easier to assess. There is also the concern that the RAE distorts the nature of research being undertaken; it discourages 'blue skies' research and forces researchers to look for short-term goals. It also encourages quantity not quality resulting in a proliferation of small-circulation journals on esoteric subjects.

The RAE is geared entirely towards the individual, not the team. This continued the now-outdated academic model of the lone scholar. It provided no incentives to encourage departmental heads or directors of research centres to manage the work of the staff within their remit; to build

teams; or to encourage the development of junior staff. According to Janet Lewis who was member of the social policy and social work panel for the 2001 research assessment exercise 'Research needs to be seen as a complex activity that is often carried out in teams and that is part of a wider context that includes teaching and knowledge transfer' (THES 2003a). RAE does not encourage inter-disciplinary work – panels are divided up in the basis of subjects. Given that it is impossible for the panels to read all the submitted publications, peer review is likely to degenerate into 'review by reputation' rather than merit.

The House of Commons Select Committee felt that the RAE has had a negative effect on university staff morale (House of Commons 2002). The practice of excluding some academics from the process was seen as divisive and demoralising. The RAE may also be a key factor in contributing to the large increase in fixed term research positions. It also effectively discriminates against certain social groups: women, young scholars and members of minority ethnic groups and fails to adequately encourage young researchers.

The RAE does not provide any incentives for academics to disseminate their work or communicate with the wider community according to the National Audit Office report *Getting the Evidence: Using Research in Policy Making* (NAO 2003). This report also provides a bleak picture of the gulf that exists between UK academics and policy-makers. The report says that academics have a poor understanding of policy questions; research results are not easily accessible and that research results lack short-term relevance. Indeed, ippr often fails to identify good policy –relevant research by academics that could inform its own work.

The House of Common Select Committee on Science was told that some departments 'have actively instructed staff not to engage in any activity that does not directly lead to the improvement of the department's RAE score' (House of Commons 2002). Like league tables for schools or targets across the public services, the RAE has come to dominate activity in some universities.

The RAE may discourage innovation. The BMA says the RAE encourages researchers to stick with safe research or become part of existing projects rather than establish new lines of inquiry. The AUT makes the point that any retrospective funding system favours 'tried and tested lines of enquiry over the adventurous and innovative'. The report for the House of Common Select Committee on Science concluded: 'We are concerned that the RAE

process may discourage long-term research of a highly speculative nature and stifle scientific breakthroughs' (House of Commons 2002).

The RAE imposes a heavy bureaucratic burden which is time consuming and expensive particularly for new universities who stand to gain the least. Some key organisations (CIHE 2003a) claim that the bureaucratic burden will increase if the Roberts Review is implemented. UUK estimate that the 2001 RAE cost between two and three per cent of the total university budget nationally. The cost is so high because it not only includes the cost of actually paying the peers on the various panels and the back-up work for them, it must also take into account the expense to each individual university in terms of management time.

The RAE may prevent flexibility in managing national priorities, continuing to underfund new areas such as media, communication and design and to overfund old forms of engineering. The fact that the funding is awarded retrospectively leaves the system vulnerable to government manipulation particularly in terms of pursuing a policy of greater concentration of funds: UUK asserted after the 2001 RAE 'We are deeply dissatisfied with a funding system that is open to retrospective manipulation so that funds may be allocated with even more selectivity'. It is worth considering the fact that the US does not have a centralised system for funding research but has a strong track record in research.

The cost of the RAE must also be added to cost of running the research councils. According to Evidence's ballpark calculations, assessing and administrating research funds costs £80 million for the funding council stream and £150 million for the research council stream (UUK 2003). As the results of the funds awarded by the research councils are very similar to the RAE, it is arguable that the dual funding is an expensive and unnecessary duplication of effort (see table on p42). According to Denis Noble, a professor of physiology at Oxford University 'much the same panels of best minds sit on the grant funding panels as on the RAE panels.' (THES 2002)

Options for Reform

Funding by institutional mission

A system based on funding by institutional mission has been proposed by CIHE and Nigel Brown. This system requires institutions to compile a business plan with relevant performance indicators setting out how they would fulfil their mission. A similar scheme based on a 'rigorous five-year 'business'

Distribution of research funding in England for QR funding, Research Council grants and industrial research grants and contract income

	QR funding, HEFCE	Research Council Grants	Industrial research grants and contracts
1	Oxford	Cambridge	Imperial College
2	University College London	Oxford	Oxford
3	Cambridge	University College London	Cranfield
4	Imperial College	Imperial College	Nottingham
5	King's College London	Manchester	The Open University
6	Manchester	Southampton	Cambridge
7	Birmingham	Birmingham	King's College London
8	Leeds	Sheffield	University College London
9	Sheffield	Leeds	Southampton
10	Bristol	Nottingham	Leeds
11	Southampton	Bristol	Birmingham
12	Nottingham	King's College London	Loughborough
13	Newcastle-Upon-Tyne	UMIST	Sheffield
14	Liverpool	Leicester	Manchester
15	Warwick	Liverpool	Newcastle-Upon-Tyne
	Total 1*	£399m	£146m
	Total 2	£581m	£215m
	Total 3	60.7%	68.0%

* Total 1: funding allocated to the 15 universities in receipt of the most funding from that stream

Total 2: research funding for all universities in England from that stream

Total 3: percentage of total funding for a particular stream going to the top 15 English universities

Source: QR allocations, HEFCE 2000/1 Research Council grants, HESA 2000/1 Industry funded research grants and contracts, HESA 2000/1

plan' has been proposed by The Chemical Industries Association. One of the chief merits of the scheme is the fact that it encourages diversity of mission by rewarding institutions for focusing on their strengths and achieving mutually agreed objectives. However, the allocation of funds according to these plans would be highly contentious and arouse more hostility and accusations of unfairness than the present system due to a lack of transparency and clear criteria of assessment. One of the apparent purposes of the RAE was to serve as a quality control regime initially driven by the Treasury to ensure that the universities are providing value-for-money in return for significant amounts of taxpayers' money. The performance indicators provide a means of assessment but the business plan model may be seen to lack clear accountability. As the House of Commons report pointed out, the business plan scheme 'could not completely replace an assessment process: a scheme such as this would need some sort of external appraisal of quality' (House of Commons 2002). It also lacks an element of competition characteristic of both the RAE and research council grants which is undoubtedly a driver for high-quality work. Solutions like this system based on central planning seem simple and orderly but are problematic and rarely achieve their goals.

Roberts reforms

Another option is modification of the current system – as proposed by the Roberts report (Roberts 2003). The review was commissioned by the UK higher education funding bodies to report on the future for research assessment in the UK and Sir Gareth Roberts submitted his findings in 2003. There are certainly merits in the Roberts proposals including the attempt to reduce the time and effort expended by the universities who stand to gain least from the RAE. According to Roberts, only the most competitive work would be assessed using expert review similar to the old RAE, called the 'research quality assessment'. The less competitive work in the rest of the institutions would be assessed by proxy measures, such as income from research council grants. This would be called the 'research capacity assessment'. Finally the least research-intensive institutions would be considered separately from the remainder of the higher education sector'.

However, there is a danger that this system will exacerbate some of the flaws of the RAE. It threatens to make the system more divisive and stratified by excluding institutions and entrenches the individualistic as opposed to team-based approach to research. It also has the potential to exacerbate the complexity and bureaucratic burden of the RAE as the review acknowledged.

Channelling funds through the research councils and abolition of RAE

The efficiency of a dual system which produces very similar outcomes must at least be questioned. The rationale for two streams is not even to provide diversity in the system, in other words to ensure different types of research are funded. The HEFCE stream is supposed to support the money awarded by the research councils. The argument for one stream of funding is persuasive. In many ways abolishing the RAE and concentrating funds on the councils would be the most logical reform of the system. The Royal Society claims that the dual system is not just inefficient but puts universities under 'insupportable' pressure (Royal Society 2003).

Abolishing the RAE would save time and funds for the universities and free up resources for other activities and needs. It would consequently serve to encourage greater diversity. Similarly universities would be less focused on achieving high RAE ratings to the detriment of other concerns.

The councils have greater potential to be egalitarian – to stimulate a broad range of researchers and reward innovative ideas. They could be an effective vehicle for promoting diversity and rewarding good research wherever it occurs. Such a system would foster collaboration – researchers from any university could team up to make bids. Research Councils offer direct benefits to researchers, while the same researcher may only see indirect benefit from the RAE, if at all. They are well placed to develop and manage national and regional research facilities accessible to researchers from any university and could therefore improve the regional distribution of research.

Reducing the funds channelled through HEFCE would also make the creation of a merged council for the funding of both HE and LSS more feasible – one of the objections to such a combined funding body was the enormous budget it would preside over.

However, some claim that relying on the research councils would only serve to increase the current level of selectivity. Cambridge got the highest amount of combined Research Council/Funding Council income in 1999/2000. If its award from the Funding Council had been calculated on its Research Council income, it would have received £78.2 million rather than £60.3 million. At the other end of the scale, London Guildhall (125th in combined income) would see its funding drop from £253,000 to £33,000. Queen Mary, University of London (22nd) would see its funding remain almost unchanged at £13.3 million. If this mechanism were used to distribute all funding, the top ten per cent of institutions would benefit at the expense of the rest. However, it is misleading to assume that the out-

comes would be the same in terms of funding from the research councils under a new regime. Institutions would adapt their strategy to the new circumstances. As stated above, rather than increasing selectivity the research councils would be an effective vehicle to promote diversity and reward good research wherever it occurs.

Some argue that the retrospective funding offered by the RAE would be a loss. But a track record is one of the criteria on which funding from councils is granted. Funding from research councils would not need to embrace all project funding. In cancer research, for example, the Research Councils provide less funding than the charities, and the Wellcome Trust invests more in biomedical research than the Medical Research Council. As the next chapter outlines, the research councils certainly need to be reformed in terms of rewarding multi-disciplinary work and research related to business, but these reforms are easily implemented.

There also might be vested interests which would be resistant to the abolition of the RAE. The Department for Education and Skills and HEFCE will resist the transfer of funds, which give power and control over universities, to the Department of Trade and Industry. The devolved equivalents might also be resistant to the idea as the research councils are physically based in England. But the councils are UK bodies and could be relocated (Adams *et al* 2003). Of course, the institutions who benefit the most from the RAE would be reluctant to support its demise. But according to Mike Driscoll, chair of the CMU 'after the debacle of the 2001 RAE, the White Paper and the league table damage of RAE scores, the scales must surely be falling from their eyes' (THES 2003b).

Research in the LSS

FE colleges could also play an important role in contributing to teams bidding for funds from the research councils. Of all activities ascribed to colleges and universities, research is usually perceived to be the preserve of the university. But as Geoff Stanton has argued the extent of research conducted in and about the LSS is often under-estimated (Stanton 2000). However, unlike university research, most research relating to FE is funded and commissioned by government agencies. Stanton also concluded that because this research tends to be more widely dispersed than HE research, the sector would benefit from a 'professional body' or an FE equivalent of the HE Institute for Teaching and Learning to track and synthesize this work.

The idea of research in FE immediately raises 'mission drift' alarm bells – that colleges will try to ape universities. But 'research' must be defined carefully and does not necessarily signify leading-edge research. A good example of the kind of research that colleges could develop is research related support for business innovation. The LSDA has undertaken some work investigating the potential of colleges to create business support as a distinct mission for some colleges and the results are encouraging. The writers of the LSDA report were alert to the importance of challenging conventional definitions of research and preferred to refer to business support as research and development. They argued 'it may be beneficial to challenge some assumptions about what is 'real' research, and look at how principles of enquiry, which are accompanied by timely and tangible results, could improve the quality of all forms of research' (Stanton and Hughes 2003a).

The LSDA research looked at colleges that were helping to introduce techniques or systems that were new to the company concerned. They were responding to developmental needs, rather than attempting to apply research findings or conduct leading edge research. There appears to be a need for applied research and development, especially for small and medium sized companies, that is not and could not be filled by the research provided by most universities. For example, a college with considerable expertise in digital imaging has found that other organisations considering the purchase of equipment were prepared to pay consultancy rates for the advice of its staff. This also involved some analysis of the organisations' systems and aims to identify their needs. Other colleges have found similar demand for advice on CAD and CAM software.

Why colleges?

Colleges are best placed to meet this need because they can build on existing links with companies – for instance, those created by the previous involvement of the college in providing training for some of the workforce. Colleges have considerable experience in working with small companies that find it culturally or organisationally difficult to liaise with a university. Many have learnt to 'talk the language' of the owner-manager of a small and medium sized enterprise, and are able to adopt a practical approach to the application of research. They can offer expertise in an occupational area in which universities do not usually operate. In some rural areas, colleges are geographically closer than the nearest university, and especially where they have outreach or collaborative arrangements with universities, there

may be scope for a wide range of research and development services for business.

Some colleges also act as a 'broker' between firms and universities when research expertise that the college cannot itself provide is required, or where each party needs to be 'interpreted' to the other. Similarly a few colleges are members of regional consortia, which allow firms to make use of specialist knowledge or facilities available in other colleges, with the local college acting as a broker. Colleges approached by a local employer may make contact, on their behalf, with another college with more appropriate expertise or facilities.

There are clear benefits to colleges in providing these services to business.

- Colleges could derive important income from this research brokerage.
- Working with industry is a positive form of staff development and students benefit from courses which are highly relevant to needs of business.

Benefits to business and society

Supporting a company to innovate may be the most effective way of encouraging it to train its workforce. Government and the sector have a tradition of trying to persuade companies that they will become more efficient and innovative if they train their staff. But if a company is supported to innovate, training needs will derive organically from the development of the company and new skills can then be put to good use. Therefore, workforce development might be more effectively promoted if colleges were funded to help companies develop and innovate, rather than funding being used (for instance) to market or subsidise qualifications and courses.

There is therefore a case for organising the activities colleges are pursuing with local businesses into a service that some colleges could offer more formally. This service would aim to support the effective application of existing knowledge in local firms and other organisations. In this it would differ from what might be seen as the primary purpose of research in universities, namely the creation of new knowledge. The intended outcomes of the service would not be to publish articles in academic journals, but to have a positive impact on individual companies and the local economy. There may also sometimes be a place for evaluation reports, but these would be of secondary importance to the business application.

Funding

Some of the colleges identified in the research were using the FE Standards Fund for this purpose. But a sustainable, business-related R&D service will require an appropriate infrastructure. Demands for training for which fees would be charged may emerge naturally from R&D services, which themselves could be provided at a commercial rate. However, an assured funding stream for the service infrastructure, particularly in its early stages, would ensure that it develops without being distorted by the need to secure 'quick wins' from training in the short term.

Colleges in Wales can draw upon the Knowledge Exploitation Fund (KEF) on the same basis as universities. The fund has five strands: helping institutions generate an entrepreneurial culture; boosting skill levels in industry; expanding the skills of the trainers (including support for their placement in industry and research establishments); accelerating the commercial exploitation of research; and stimulating technology transfer. Colleges in England should have access to the HEIF (Higher Education Innovation Fund) – the third leg funding currently confined to universities, a theme we develop in Chapter 4.

Developing business research in colleges – obstacles and issues

The distinction between conventional research and research for business must be clear particularly in colleges which have developed a research capacity. Expectations on the part of the college of a formal research record may not match the client's requirements for practical solutions, and may skew the service towards research which is not as immediately useful to the company concerned.

While some colleges are beacons of responsiveness to business need, many others are not as proactive in meeting the needs of local businesses. Although some colleges have dedicated business units, the interface between colleges and employers needs further development. Some companies and other providers of support for business see colleges as unresponsive to their needs. The prevailing culture is based on serving the needs of individual students. Employers are not seen as 'customers'. Colleges will have to become more responsive to business need to maximise their ability to deliver business-related research.

College for business

Previous initiatives that aimed to develop colleges' responsiveness to business failed to bring about a culture change because they remained a marginal activity undertaken by few of the full-time staff in the college. This focus on business related activity could be enshrined in the 'college for business' concept as outlined by LSDA and developed in conjunction with Sussex Learning and Skills Council (Hughes and Stanton 2003b). A college for business would see its core purpose as meeting the needs of business and industry, as distinct from colleges with a mission to serve the needs of the community, or to prepare young people for higher education. The aim of the college for business is to embed responsiveness to business needs in the culture of the college and specifically not to focus on providing short courses for employers or concentrate business activity in separate units (see below). In addition to business-related research, the college for business could also specialise in providing:

- a gateway to the workplace, where initial knowledge and skills are developed. This may be defined by age, that is provision for 14–19 year olds on college or work-based programmes, but it could also include provision for HE graduates and returners to the workforce;
- training for the current workforce to acquire new processes and promote adaptation; and
- a brokerage service connecting business to colleges and universities support networks for small and medium-sized enterprises.

Conclusion

Some selectivity in funding research is necessary but the Government should not pursue a policy of greater concentration without stronger evidence of the benefits. The rationale for the distribution of research funding should be to promote high quality research both academic and applied wherever it occurs. Any funding system must recognise and reward innovation and talent wherever it is found. The RAE should therefore be replaced by a funding system which channels funds through the research councils

Some colleges should be encouraged to develop a mission in business-related research. The pilot schemes in Sussex suggest that the 'college for business' could be an effective vehicle to facilitate this mission. However,

some ongoing issues need to be resolved before the idea is suitable for wider implementation.

In order to establish this mission, colleges should be permitted to access the 'third leg' funding through the HEIF (Higher Education Innovation Fund) which is currently restricted to HE institutions.

4 Diversity...business

Centres of Vocational Excellence

The CoVE initiative was set up in 2001 to bring colleges together with business and industry in order to deliver specialist vocational training to meet local employment needs. By 2004, 251 CoVEs had been established, 214 in colleges and 37 in companies conducting work-based training. CoVEs are the cornerstone of the government's plan to reinvigorate technical and vocational education in England and have been set some remarkably ambitious aims (listed in Table 1). Indeed they appear to be expected to make a significant contribution to the achievement of many of the government's objectives for the whole LSS. Given this one would expect the initiative to be subject to rigorous evaluation. However, the ability of the CoVEs to achieve these aims is unclear.

Table 1 The eight key desired programme outcomes for evaluation of the CoVE programme

- Aim 1** A significant expansion in vocational learning, particularly at Level 3, in terms of overall volumes and participation rates.
- Aim 2** Increased effectiveness in addressing skills priorities through CoVEs, particularly in being responsive to the needs of employers.
- Aim 3** An improvement in learners' achievements in Level 3 provision, including progression into employment and advancement within employment.
- Aim 4** Widening participation of non-typical learners in Level 3 vocational qualifications and the participation of adults.
- Aim 5** A significant increase in the extent of collaboration amongst learning providers and the promotion of the concept of excellence and continuous improvement in economically important vocational specialisms.
- Aim 6** An expansion of the use of industry standard equipment and facilities in the post-16 sector, including leverage of greater employer contributions to enhance provision.
- Aim 7** Examples of innovation and flexibility in order to meet the needs of employers.
- Aim 8** A positive change in the attitude of employers and involvement in training as a result of the quality of post-16 provision and the impact on meeting the skills needs of the workforce.

Certainly many principals are positive about the initiative and the ability to invest in one area of their provision with the additional funding CoVE status brings. New CoVEs receive up to £300,000 in the first year they join the programme for development work leading to formal recognition and up to £100,000 in each of the second and third years to maintain and extend their work.

A report commissioned by the Learning and Skills Council to measure the progress of CoVEs detailed increasing learner numbers, high levels of employer satisfaction, and widespread optimism about widening participation. The report concluded: 'Overall, the aims of raising the standards of vocational learning and increasing the relevance of provision to employers and industry have been embraced by providers' (GHK consulting 2003).

However, this was not a robust evaluation and mostly relied on the predictions of colleges and the report identified widening participation as one of the goals that does not seem to be achieved by the CoVEs. The Association of Colleges has also expressed the concern that CoVEs poach students from other colleges rather than increase numbers overall. Confusion over the bidding process amongst colleges also indicates some lack of clarity over the key aims of the initiative. The process was neither transparent nor robust according to some principals who did not realise that CoVE status was not primarily granted on merit but according to local, regional, national and sectoral training needs. According to one principal 'during the early stages of the CoVE implementation process it appeared that policy development was being made on the hoof and that the criteria for assessing applications were being evolved gradually'.

The Chief Executive of the Learning and Skills Development Agency has said that the initiative will only work if colleges focus more on working with employers as clients to meet their skill needs. It is surprising that the LSDA study on the college for business concept (Hughes and Stanton 2003b) identified the relationship of these colleges with the CoVE initiative as an issue which is yet to be resolved. It adds to concerns that that the CoVE initiative has not yet had an impact on the culture of the college as a whole.

Moreover, the perceived need for the 'college for business' raises questions about the efficacy of the CoVEs in fulfilling the needs of employers. CoVEs may have a role in encouraging colleges to strengthen a key area of their provision but the college for business model may be more effective in establishing an institutional culture which responds to industry. One of the

main objectives of the college for business model is to embed a responsiveness to business needs in the culture of the college as a whole as opposed to creating separate units dedicated to business. The LSDA report drew attention to the importance of this 'whole college' approach and acknowledged the difficulty of establishing this culture. According to the report, misunderstanding of the 'college for business' concept led to the tendency, particularly among staff and managers who were not centrally involved in the project to equate colleges for business solely with provision of full-cost short courses for employers. Linked to this it was sometimes thought that business development units could be given sole responsibility for necessary developments.

The college for business model is promising but it cannot fully provide an answer to the problem that COVEs are attempting to solve. Given time, COVEs may prove to have made progress in improving the quality of vocational education and strengthening links with employers. They may have a greater chance of success if the objectives they are expected to achieve were narrowed down. Certainly, as argued above, there is a case for encouraging colleges to focus more on their strengths and define their missions more tightly. But the Government needs to be clearer about the role they expect colleges to play; more thought needs to be given to how greater specialisation and responsiveness to employers can best be achieved without losing focus on other key strands of the traditional college mission such as second chance education.

Research and industry

HE institutions in the UK earned around £259 million from contracts with UK businesses in 2000/1 representing seven per cent of total research income – an increase from six per cent in 1990/1. As the figure in Chapter One showed, there are considerable differences between institutions with regard to the proportion of revenue derived from industry. UK universities have changed their approach to working with business over the past ten years and academics are more likely to welcome the chance of working with industrial partners than used to be the case. This trend has been driven in good measure by funding. Universities have been forced by economic circumstances to hunt around for new sources of cash and equipment, putting a new emphasis on business partnerships. Third stream funding, although relatively modest in size, has provided an incentive to

build relationships with business. In addition, the development of new science-based businesses has created fresh opportunities for researchers to work with business.

But there is substantial potential for HE institutions to capture further work from businesses. BP spends around \$900 million on technology of which \$300 million is advanced research and only a small percentage is on universities. Unilever spends £150 million on R&D at its own laboratories and only £16 million at universities.

There are several reasons for the relatively low levels of business-related research and industry investment in university research. In many ways, businesses and universities do not make easy bedfellows. They have different values and different missions. They work on different timescales towards different objectives under different management systems. The existence and potential significance of research in universities is not regularly audited or brought together in a way that can be easily accessed by smaller companies. But at the same time, there is a lack of demand for university research from business and a low take up of R&D tax credits.

The funding bodies present further obstacles. Given the choice between producing an academic paper and working with industry, an ambitious academic is more likely to take the former option: that way lies extra funding for the department, and an increased chance of promotion. The Lambert Review came across a number of cases where departments had deliberately decided not to work with business in order to concentrate all their efforts on raising their RAE rankings. There are also too few representatives from business on research councils.

Solutions

All HE institutions should develop their capacity to increase links with industry, but the range of business-related research from the blue skies to basic problem-solving should be acknowledged. All institutions could carry out evaluations of research activities and ensure a summary is available to business.

There are three key reasons that all HE institutions should be engaged in some form of industry-related work:

- They should all seek to increase revenue obtained from industry
- Courses should be informed by industry needs but should not be tailored too specifically on predictions of labour market needs. The track

record of FE and HE institutions on labour market planning has not been strong.

- Industry would benefit from drawing on the research undertaken in post-16 institutions.

As the Lambert review found, proximity to an HE institution is important, especially to small and medium-sized companies. Even big businesses find it harder to collaborate with university departments on the other side of the country than they do with those that are within easy reach of their base. Small companies do not usually have the time or money to build partnerships with university departments that are not located in their neighbourhood. So business across the UK would not be well served by a university system which concentrated all its research expertise in the south eastern corner of England.

Specialisation

However, there is scope for some institutions to develop their business links further and there are activities which not all institutions should be expected to engage in. The HE White paper attempted to facilitate this specialisation through the creation of 20 knowledge exchanges which would each receive up to £500,000 a year for five years. A knowledge exchange will need to demonstrate strong relationships with employers and business – in both the public and private sectors, among other factors. But the Government's proposal that the knowledge exchanges should primarily be set up by HE institutions in the Coalition of Modern Universities has been criticised in the sector. Many representatives across the range of HE institutions have argued that it is more logical for the institutions who conduct most of the industry related research to be the first point of call for industry. This criticism is justified to some extent. It is largely the Russell Group institutions that have undertaken research and development for industry. But the more applied research that post-1992 institutions and some FE colleges conduct also qualifies them for an important role as 'brokers' between institutions and companies.

Therefore knowledge exchanges should be formed by a consortia of pre- and post-1992 institutions and ideally an FE college. At present consortia bids are encouraged but are not compulsory. Knowledge exchanges should also offer a region-wide or broad sectoral perspective and help businesses

of all sizes access HE and FE research and problem solving across a range of institutions.

The knowledge exchanges should take the Knowledge House in the North East as a model. This regional centre has proved to be successful as an access point to much of the research that the HE institutions in the North East are undertaking. It is particularly helpful to small and medium sized enterprises that do not have the resources or capabilities to find out from each institution what might be relevant to them. It is also staffed by people who have experience of both industry and HE – a combination which is not very common. The number of staff with business experience should be increased by encouraging secondments to industry. The abolition of the RAE should facilitate these secondments as academic staff would be freer from the primary duty to contribute to the success of their department in the RAE.

Embedding some HE institutions in industrial networks is common in the US and crucial to the success of spin-off companies. The Government has made much of the fact that the spin-off rate of businesses by UK HE institutions is higher than in the US. But the survival rate of these companies is far less impressive. There is a need for some UK institutions to specialise in creating these dense networks and fluid relationships with business and to focus more on start-ups than spin-offs (Ternouth 2002).

Funding more business-related research

Giving companies more access to information about the research undertaken in HE institutions and increasing the number of secondments from these institutions to business and vice versa should go some way to encouraging businesses to invest more in university research. It is important that government should not be in the business of subsidising industry's near-market research. Companies should pay at least the full economic cost of contract research, and should be looking to universities for help in their research efforts rather than in their product development.

However, there is a role for government in providing funding to support the development of research which could subsequently be funded by industry. An example cited by the Lambert review is the collaboration between the Wolfson Centre at the University of Greenwich and GlaxoSmithKline. In addition to the funds provided by Glaxo, the Wolfson Centre needs funds to maintain its basic research and infrastructure. Currently these needs are

not met by the dual system and this centre and others like it will be at risk of receiving no funding if plans for greater concentration of RAE funds proceeds. The centre would not qualify for HEIF funds which do not support actual research projects.

The Lambert review has proposed a significant new stream of business-relevant research funding of approximately £100 to £200 million, which would be available to support university departments that can demonstrate strong support from business. There is a case for the state to invest funds in building an infrastructure that can create and sustain the relationship between business and HE and encourage collaborative projects which will become self-sustaining.

The Lambert Review suggests that the best vehicle for distributing such funding would be the Regional Development Agencies (RDAs) and their equivalent bodies in Scotland, Wales and Northern Ireland. However, the review anticipates hostility to the idea of allocating this budget to the RDAs because 'some RDAs do not have the capacity to create dynamic relationships' between business and universities. The wariness of these critics is justified. There appears to be considerable inconsistencies in capacity of the RDAs to perform their present duties. Moreover, as Lambert points out, the relationship between the RDAs, local LSCs and local partnerships must be clarified if they are to be useful in promoting links between post-16 institutions and business. At present there is little evidence of their 'value-added' impact.

As a safeguard against the failure of the RDAs, Lambert suggests stringent performance management powers for the centre. RDAs which failed to hit their targets on business-university collaboration might have the money taken away from them and handed over to more successful authorities. There may be a role for RDAs when they have established a track record that inspires confidence in their ability to allocate substantial funds. As business-led organisations and close to the market, the RDAs might also act in an advisory role to the body appointed to dispense the fund.

It would make more sense for the remit of the Higher Education Innovation Fund (HEIF) to be broadened to support research projects like the Greenwich-Glaxo collaboration, particularly as the government is attempting to rationalise too many separate funding pots for HE. The arguments Lambert posits against channelling the funding through the HEIF are not persuasive. HEIF funding could be awarded to specific departments rather than universities, as is presently the case. The risk that the initiative

would become supply-side driven if funded by the HEIF is also not a major objection if departments can demonstrate business support and if the RDAs in their advisory role can judge this. Greater consideration should also be given to incorporating a stronger demand-led approach like the US system. As suggested in Chapter 3, institutions in the LSS should also be able to bid for these funds and indeed this should be explicitly encouraged either as individual institutions or in consortia with HE institutions.

Finally, more representatives from business should have a seat on the research councils particularly if they are to become the primary funding stream for research. The councils must also make more concerted efforts to break out of their individual specialisation and develop multi-disciplinary research projects which are more applicable to business research. One of the main aims of Research Councils UK is to address these issues urgently.

Conclusion

The College for Business model should be explored as a potentially more effective initiative than CoVEs in creating a culture of responsiveness to business need. Critically, the CoVEs should be properly and independently evaluated against their ambitious aims and not by the Learning and Skills Council which has a vested interest in their success.

UK HE institutions have increased their revenue from industry over the past decade but there is scope for a substantial increase in funds derived from business. All institutions should be engaged in basic business-related activities. Some should specialise in developing business-related research; they should be embedded in industrial networks and encourage secondees in and from industry. Some institutions should focus on start-up companies.

Knowledge exchanges should have a regional focus and be steered by a consortia of research-intensive institutions, institutions from the CMU and ideally an LSS provider. Funds should be available to support business research projects in both HE and the LSS through the HEIF. RDAs should act as advisors on the administration of these funds.

5 Diversity...structure

Greater collaboration across institutions is a key theme of Government policy across the education sector. For example, collaboration with other schools is a condition that specialist schools must fulfil and foundation degrees must be delivered by consortia comprising at least one employer and an HE institution and most foundation degrees are actually provided in FE colleges. A key rationale for the Government's emphasis on collaboration is that students, particularly from non-traditional backgrounds, will gain greater access to educational opportunities. It is also expected that the Government will adopt the substance of Tomlinson's recommendations on the 14 to 19 agenda (DfES 2004). Extensive collaboration between providers in the LSS will be crucial to the implementation of the Tomlinson vision and questions will be raised about how much structural change should accompany the reforms. Some argue that the advanced diploma should ideally be taken in sixth form colleges. Others believe that segregated 16 to 19 provision is at odds with the spirit of a 14 to 19 agenda which allows students to progress at their own pace and aims to offer as wide a choice of subject, both academic and vocational, as possible. The structure of post-14 system should surely be designed to support and facilitate the objectives of the new curriculum.

Merger or collaboration

Calls for a rationalisation of the post-16 sector are a frequent occurrence in the policy debate. Alex Neil of the Scottish National Party, chairman of the Universities' Association for Continuing Education Scotland recently claimed that universities based in a single city, such as Edinburgh, Napier and Heriot-Watt, should merge. One university per city should be the rule if Scottish higher education is to maintain its place in the international research league. The White paper on HE also encouraged further mergers in the interests of 'rationalising resources' and 'cost effectiveness'.

Successful mergers can be cost-effective. An analysis commissioned by the LSC and DfES of 17 mergers involving FE colleges found that mergers can yield long-term benefits including widened participation, new building, improved accommodation and curriculum development (see Centre for Education and Industry, University of Warwick 2003).

However, there is a growing body of opinion that mergers are no 'quick fix', can be fraught with difficulties and can actually be counterproductive.

- The report cited above concluded that FE colleges frequently underestimated the potential problems they would face in combining with another institution. All of the case study colleges underestimated the length of time it would take to complete a merger.
- There appear to be few short-term benefits over and above those of saving a college and keeping jobs.
- There are few financial benefits, despite considerable costs.

The evidence regarding the benefits of merger in any organisational structure in the private and public sectors is weak. Effective collaborative arrangements can yield both the advantages of merger without the cost and disruption or loss of individual identity. They also preserve small institutions which arguably make a valuable contribution to diversity in the sector. The government has also encouraged institutions to engage in collaboration across the education sector from primary schools to universities.

Existing collaborative arrangements

There is a diverse range of collaborative arrangements across the post-16 sector. A review of models of 16 to 19 collaboration by Munday and Fawcett (2002) identified a number of arrangements for collaboration, separating models of planning and delivery. However, they found little evidence of independent work-based learning providers included in these arrangements. They indicated that the most common examples were:

- *Bilateral arrangements*: Small-scale arrangements, involving only two Institutions, that can be school/school or college/school. They tend to be found where there are single sex schools or schools with small sixth forms. These arrangements can range from joint sixth form provision with a single head of sixth form to less formal relationships.
- *Consortia arrangements*: These tend to include a number of providers and have well-developed management and organisational structures and extensive common systems; some have formal agreements.
- *Curriculum delivery*: Where organisations agree to complement delivery of parts of the curriculum; for example, shared curriculum timetable.

- *Shared premises*: Where there is agreement between institutions that are geographically close to deliver programmes in a single place.
- *Specialist resource*: This has tended to focus on arrangements between colleges and schools, in particular, to make specialist resources available to complement the curriculum offer. These agreements have a tendency to be semi-permanent and be negotiated and renewed on a regular basis.

This latter type of arrangement, whereby specialist resources are made available between organisations, is likely to be of interest as FE colleges and work-based learning providers achieve Centre of Vocational Excellence (CoVE) status and large numbers of schools obtain Specialist School or Academy status. Specialist Schools will be expected to collaborate with other providers, as this is a condition of their funding.

Examples of collaboration and federations

Joint working between FE colleges

North East Colleges Network

Consortium of 15 Colleges in the North East under a Company Limited by Guarantee to provide networked education and training services, predominantly using flexible online training.

Large broad-based FE/HE college, engaged in local collaborations

Norwich City College

Provides over 800 courses to 20,000 students, including vocational, academic and leisure programmes. It also runs the prison education programmes for eight East Anglian institutions.

It has a service to business in the region and provides Foundation and Advanced Modern Apprenticeships. It operates from a large city centre site, but also has a range of outreach locations known as learning stations. As a regional college of Anglia Polytechnic University, it offers full and part-time degrees across a range of subjects and also offers courses leading to postgraduate, professional and Higher National qualifications.

Joint working between work-based learning providers

In Touch Care, based in Sheffield, has spearheaded a network that is

very successful: they are currently looking to extend the approach from care to construction.

Large FE college engaged in pre-16 and HE collaborations

City and Islington College

The college has developed some innovative planning relationships with the LEA and higher education institutions. The college's Sixth Form Centre is now recognised as a regional centre of excellence and has forged a unique relationship with University College.

Joint working between Universities and FE collaborations

The Crichton University Campus

This campus is a development involving four education establishments with premises on the Crichton estate in Dumfries: the universities of Glasgow and Paisley, the Open University in Scotland and Bell College. The campus also runs in conjunction with Dumfries and Galloway College. The courses offered by the higher education partners range vastly in diversity and include Creative and Performing Arts, Environmental Studies, Business Information Studies and Adult and Mental Health Nurse Education and Training. By 2005 it is envisaged that there will be around 1500 students on the campus.

Examples of different structural models

Confederacy Model

In this model organisations mutually agree to coordinate and combine some of their functions and services. Individual identities are preserved but scale economies achieved, the range of products increased and quality improved as resources are pooled and focused on developing the best the partners bring to the group. Some administrative functions such as payroll, personnel and estates are pooled and taken into a 'holding company' that serves the needs of all the members of the confederation. Where necessary to overcome different terms and conditions between HE and FE institutions, staff are seconded to a separate trading company that sets its own unified terms and conditions (see CIHE 1999; 2003c). Examples include the Higher Education and Training Partnership (HETP) involving the

University of Middlesex, and neighbouring FE colleges in Barnett, Harlow, Waltham Forest and the College of North East London.

Multiversity or federation

David Melville, Vice-Chancellor of Kent University, is credited with developing the 'multiversity' in the form of the North Kent Learning Partnership. According to Melville 'The multiversity brings together all of the higher and further education institutions in Kent into a common, cooperating structure which ensures a comprehensive response to the education and training needs of employers and individuals...it will operate at a variety of virtual and real locations...it will link pre and post-16 education while also promoting a range of novel interactions between educational institutions and employers. It will guarantee ladders and bridges of progression from one level to the next and will work with local businesses in innovation and enterprise centres and research parks' (University of Kent 2003).

The Multiversity is a looser alliance than a confederation but there is considerable overlap between the two. The success of these collaborations in achieving their aims is hard to gauge at this stage but certainly Kent has succeeded in significantly increasing the number of applicants to the university over 2002/3 (UCAS 2003).

Benefits of collaboration

Collaborative arrangements enable students to benefit from institutions which are focused on their strengths whilst providing access to greater choice and higher quality through links with partner institutions. They can be particularly important to non-traditional students who gain greater access to more opportunities. Unlike mergers, collaborative arrangements allow institutions to preserve individual identities. Many collaborative ventures also include benefits to the surrounding community; mergers focus on the benefits to the institutions involved.

There are many benefits for institutions. Collaboration can be cost-effective – pooling resources such as certain student services, medical and careers services and equipment that might be too expensive for individual institutions to purchase. The 2003 Qualifications and Curriculum Authority assessment of HE in FE found over half of FE colleges had out-of-date equipment. The need to develop 'new kinds' of provision may call for greater sharing of expertise and experience between colleges. A major

potential advantage of the collaborative arrangements is that they would allow for the distribution of risk both within new ventures, and for the sustainability of provision that has strategic importance for the sub-region. Collaboration can facilitate the collection of data such as movement between institutions, when traditionally data collection in many FE colleges has been poor.

For some, the government's vigorous emphasis on collaboration represents a U-turn on the policy of adopting the quasi-market as the key vehicle to achieve greater efficiency and quality. For others, there are limits to the efficacy of the market model and collaboration merely complements competition. Most of the benefits outlined above represent ways in which collaboration may be a more effective way of achieving the government's aims than the market model. In fact the private sector often engages in collaboration and some organisations succeed in promoting different, competing products. For example, organisations such as Diageo strongly promote the individual consumer brands (Guinness, Gordon's Gin, Burger King) while securing economies of scale even in the purchase of design and communication (media) tools. This example is particularly relevant to collaborative arrangements which involve a coordinating body such as the Greater Manchester Strategic Alliance. But as the list of obstacles to effective collaboration indicates, the relationship between competition and collaboration is often tense.

Obstacles to collaboration

Collaboration with those seen as competitors in the same learning market can be difficult particularly amongst institutions in close proximity. Some of the most successful collaborations are between institutions in different areas. Some institutions may be reluctant to encourage students to progress to higher level courses if it means losing that student. Concerns for the success of the institution as indicated by inspection reports and league tables may frequently take precedence over the will to collaborate.

Some institutions have few incentives to collaborate. Prestigious institutions with high numbers of applicants are less convinced of the need to collaborate than their less successful counterparts. There are few intensive collaborations in HE between Russell and non-Russell Group institutions. Collaboration in the specialist school programme has also been shown to be weak according to Ofsted (Ofsted 2001). Reluctance to collaborate can

also be compounded by the fear of more bureaucracy and the perception of unnecessary duplication of existing arrangements with regard to more formal alliance. Certainly experience has shown that one of key difficulties in forming collaborations is reaching initial agreements. According to David Melville who was instrumental in establishing the North Kent 'multiversity', this is the most challenging stage in setting up an alliance.

Other barriers include legislative matters such as the terms and conditions of staff, statutory differences between types of provider; funding regulations, arrangements and requirements; and practical issues relating to timetables, transport, starting and finishing times which are difficult to coordinate. The pressure of different institutional and community cultures can also be an obstacle. Mundane issues such as maximising the use of existing buildings and other capital equipment must also be taken into consideration.

Factors in the success of collaboration and alliances

Commitment from the top is crucial to the success of a collaboration as is the drive or personality of key individuals. Ownership by the Executives of the institutions is needed up front. One model (HETP) did not allow any substitutes at senior level meetings. These meetings were held monthly, well-attended and business-like with agendas, papers and minutes of high quality. Action was followed up. Each project team was led by one of the Executives, thus showing and embedding their high-level commitment. At the same time it is necessary to devolve ownership and responsibility to the appropriate operational level. It is at that level that plans can be realised or not. The timing of devolving responsibility and how the balance between continued high level/central ownership and lower level/local involvement is handled is something that requires careful thought. Good support from the Local Authority and a positive, open-minded ethos in the local education and training community is vital. The centre can give a steer and incentives but collaboration must emerge bottom-up. In successful collaborations, all partners are committed to the idea that collaboration may be a more beneficial to the institution than competition. Several principals noted a shift in culture from a wholly competitive approach to a more open collaborative approach amongst institutional management.

The appointment of a senior consortium director or coordinator and full-time secretariat is important. Many alliances are tempted to allocate duties to existing staff who are then expected to cooperate with each other. The danger

Manchester case study Structure of the Alliance

The Alliance is seeking to create the conditions under which better collaboration between institutions leads to enhanced (and clearer) opportunities for learners. As such, the Alliance should be a member-led and member-owned body whose functions are carried out in part by a 'visible' Alliance office with core staff and chief executive and in part by the member institutions.

Features of the alliance

- There should be **total transparency in funding arrangements** and these should include value for money and service level agreements between the member institutions.
- The Alliance should be **owned collectively** by its institutional membership.
- The Alliance will need to be seen, and to act, as a '**neutral broker**' in its dealings with institutions and in its relationships with other organisations and agencies.
- The Alliance will depend upon the establishment of trust between the various partners. For this reason, we shall propose a **phased implementation** of the Alliance which we hope will facilitate the building up of trust over a period of years. One of lessons from the establishment of HEPT was that it is necessary to choose a few realistically achievable priorities while recognising the wider vision and context. It is not possible to provide a totally integrated framework or to make progress on all fronts at the same time or speed. The process of developing a partnership is messy and a pragmatic step-by-step approach is inevitable.
- There might be **different levels of membership** of the Alliance to reflect different institutional circumstances and priorities. Recognising the different views and circumstances of institutions in Greater Manchester, we believe it desirable for different levels of membership to be available. We see no reason why all members should not

contribute to and benefit from the activities such as Mapping and Monitoring, Direct Services to Students, and External Awareness or Environmental Scanning. Participation in these activities would therefore constitute a basic level of membership.

Other activities – which imply greater levels of collaboration between institutions (mainly those listed under Direct Services to Institutions and Coordination of Institutional Activities) – might be undertaken by a smaller ‘core’ group. We note, and tend to agree with, the view expressed to us that institutions should not be given unlimited choices about the level of their involvement with the Alliance. Therefore, it is probably not desirable for institutions to pick and choose between this larger set of Alliance activities but commit either to the ‘basic’ or to the ‘extended’ set.

here is lack of cohesion and if staff are not dedicated to the alliance, the work allocated to the alliance may not be a priority. However, a balance must be struck; allocation of responsibilities for specific areas of work (including curriculum) to each of partner colleges helps secure wide involvement.

It is important that financial arrangements are transparent and equitable and that there are common timetabling, assessment and reporting mechanisms. It is easier for collaborative arrangements to operate in compact geographical areas with efficient transport arrangements.

Some of these factors emerged from a case study undertaken with CHERI into the feasibility of a Strategic alliance between FE and HE institutions in Greater Manchester (CHERI 2003). The study involved desk-based research and also extensive interviews with practitioners and management in FE and HE institutions. The summary below outlines the structure which the project recommended for Greater Manchester and which could serve as a model for other alliances. However, modifications to the model may be required for other areas which may be operating in different circumstances with different traditions and local politics.

Developments of collaborative models

Collaboration is one of the keys to diversity. Institutions in both HE and the LSS can specialise without reducing choice or opportunities for both staff and

students. Staff at teaching-only institutions can take sabbaticals to pursue research interests at research-intensive universities or research centres. Students at post-1992 universities or colleges could take one or two modules at a Russell Group university which they might otherwise have never experienced. This might not be the local institution; courses might follow the Open University model of summer schools or make more extensive use of distance learning.

However, any model of collaboration should not be dependent on the use of IT. Evidence shows that IT based learning can be more expensive than traditional forms of learning and the demand for many IT based courses has been low (see Chapter 2). IT certainly has an important role to play in supporting learning and in facilitating access to courses, information and advice on the internet but physical proximity to the tutor and fellow students is still an important component of the learning process.

Any collaboration in HE or the LSS might also adopt a common admissions procedure similar to the ippr recommendations for a common process for school federations (see Johnson 2002). The latter model includes a policy whereby pupils and their parents apply to a federation, stating a preference and the federation allocates a place at one of the member schools. Many institutions are very protective of their admissions process but they would not forfeit control over the decision-making process. The post-16 model differs from the schools model in some ways. Unlike pupils, students have a set of qualifications which largely determine their post-16 destination. Individual institutions would still be able to set criteria for entry to a course and the right to assess each applicant. The advantage to the students includes the fact that if a student fails to obtain the requisite grades or points, they would be automatically considered by another member of the federation with lower requirements and have a better chance of acceptance than students who have not applied to that federation. The student might not be based at their desired institution but would have the opportunity to take modules there.

Conversely if a student obtained better grades than expected, they could automatically be considered by the institution with higher entry requirements. This is especially relevant for many students from non-traditional backgrounds who are more likely to underestimate their results (see Piatt and Robinson 2001). The present system of application to universities before the publication of results means that many students who have done better than expected do not get the chance to revise their initial choice. If a post-application admissions process is implemented, this problem of 'uninformed' decision-making will be minimised. But there would still be benefits from applying to a federation as

criteria other than exam results are assessed and may lead an institution to consider a candidate particularly strong and make an offer even if she or he has applied to another institution in the federation.

Some institutions, particularly those deemed to be the most prestigious and with a high number of applicants, are reluctant to collaborate and see no benefits in doing so. This is often the case amongst academics at the institution even if the Vice-Chancellor and senior management appear to be enthusiastic. As collaboration brings considerable benefits particularly to students and staff and would become increasingly important in a more diverse, specialised sector, there may be a case for a stick in addition to a carrot approach. At the moment institutions can draw upon funds from HEFCE to form alliances and collaborations but, unlike specialist schools, they are not required to collaborate as a condition of the extra funding they receive. There may be a case for including a requirement to collaborate within the conditions attached to the freedom to set variable fees. It will also be important to ensure that the spirit of this condition is fulfilled. Ofsted found that many schools were not attaching sufficient importance to collaboration and tended not to collaborate with more 'challenging' and 'disadvantaged' schools (Ofsted 2001).

Conclusion

Few would disagree that there are benefits to be gained from nurturing a diverse post-16 system. Creating a consensus on what is meant by diversity, how much is desirable and how it is to be achieved is more problematic. A variety of providers offering a range of courses and modes of provision can increase choice, fulfil the needs of the 'consumer' and create a positive competitive environment. Greater specialisation and a more honed institutional mission can also improve quality. Genuine collaboration between more specialised institutions can also facilitate access and extend opportunities. Diversity is not incompatible with equality. The state has an important role to play in removing the barriers to diversity and collaboration and not perpetuating them with conflicting policies. But the Government should avoid the temptation to engineer and impose diversity through policies which are not sufficiently based on evidence. Ministers should create the optimum conditions for institutions to respond to the diverse needs of employers, students and the wider community and create what David Watson calls a 'genuinely complementary mosaic of differentiated institutions – colleges as well as universities'.

Bibliography

- Adams J, Robinson P and Vigor A (2003) *A new regional policy for the UK* ippr
- Association of University Teachers (1997) *Universities: The staff view* AUT
- Barnett R (1990) *The Idea of Higher Education* SRHE and Open University Press
- Brown N (July 2001) *Funding by Mission: An exploration of the public funding of Higher Education institutions on the basis of business plans* CIHE
- Brown R (2002) 'New Labour and Higher Education: Diversity or hierarchy' Inaugural Professorial Lecture, University of East London, 26.3.02
- Callender C (2004) *The Changing Finances of Students Studying in London: Evidence from the student income and expenditure survey* GLA
- Centre for Education and Industry, University of Warwick (2003) *An evaluation of mergers on the further education sector 1996-2000* Department for Education and Skills
- CHERI (2003) *Report of a feasibility study of the creation of a Greater Manchester Strategic Alliance* internal report
- CIHE (2003a) *Sustaining and Assessing University Research*
- CIHE (2003b) *University-Business Collaboration*
- CIHE (2003c) *Diversity and Cooperation in Higher Education*
- CIHE (2001) *Cooperation and Collaboration*
- CIHE (1999) *Partnerships for Excellence: A 'confederacy' model for HE/FE partnerships*
- Conlon G and Chevalier A (2001) *Rates of Return to Qualifications: A summary of recent evidence* CIHE
- Court S (1998) 'The RAE: The Basis for a New Gold Standard in HE' in Jary D and Parker M (eds) *The New Higher Education: Issues and directions for the post-Dearing University* Staffordshire University Press
- Davies P (2003) *Rising to the Challenge: widening participation and raising achievement in sixth form colleges* LSDA
- DfES (2004) *Working Group on 14-19 Reform: Interim report*
- DfES (2003a) *Youth Cohort Study: Activities and experiences of 16 year olds, England and Wales 2002*
- DfES (2003) *Future of Higher Education* White Paper
- DfES (2002a) *14-19: Extending Opportunities* Green Paper

- DfES (2002b) *Success for All: Reforming further education and training – Our vision for the future* Discussion Document
- DfES (1999) *Learning to Succeed* White Paper
- Edem A (2003a) *Provider Missions and their Development* LSDA
- Edem A, Spencer P and Byfield B (2003b) *Organisation of Provision of post-16 Education and Training* LSDA
- Fletcher M (2001) *Mergers, Size and Specialisation in the FE Sector* LSDA internal research paper
- FEFC (1998) *The Financial Benefits of Mergers of Further Education Colleges*
- GHK consulting (2003) *Evaluation of the CoVE Initiative* LSC
- Greener A (2004) 'Isn't it time we put the consumer first?' Lecture to the Learning & Skills Development Agency LSDA
- The Guardian* (2001a) 'Private Gratitude' 22.5.01
- HEFCE (2000) *Review of Research*
- House of Commons (2002) *Science and Technology Select Committee Report on the RAE* The Stationery Office
- Hughes M and Stanton G (2003a) *A Basis for Skills: Further supporting business* LSDA
- Hughes M and Stanton G (2003b) *A Basis for Skills: Developing the 'college for business' in Sussex* LSDA
- Johnson M (2003) *Not Choice But Champion: A new look at secondary admissions in London* ippr
- KPMG (2003) *Models of HE/FE Mixed Economy Provision* Department for Education and Skills.
- Lambert R (2003) *Lambert Review of Business-University Collaboration: Final report* The Stationery Office
- McNair S, Parry G and Garrett R (2004) *Learning Together: Age-mixing in Further Education colleges* LSRC
- Melville D (2003) *Diverse Missions* Presentation to ippr seminar
- Munday F and Fawcett B (2002) *Models of 16-19 Collaboration* Oxfordshire Learning Partnership

- National Audit Office (2002) *Widening Participation in Higher Education* The Stationery Office
- National Audit Office (2003) *Getting the Evidence: Using research in policy making* The Stationery Office
- OFSTED/FEFC (1999) *Effective Collaboration in post-16 Education*
- OFSTED (2001) *Specialist Schools: An evaluation of progress*
- Palfreyman D (2002) 'Higher Education in the United Kingdom: A viable elite-mass 'third way'?' *OxCHEPS Occasional Paper 4* OXCHEPS
- Parry G and Thompson A (2002) *Closer by Degrees: The past, present and future of HE in FE colleges* LSDA
- Perry P (2000) *Diversity and Excellence: Informing the debate* CIHE
- Piatt W and Robinson P (2001) *Opportunity for Whom? Options for the funding and structure of post-16 education* ippr
- QAA (2004) *Learning from Higher Education in Further Education Colleges in England* The Quality Assurance Agency for Higher Education
- Ramsden B (2003) *Patterns of Higher Education Institutions in the UK: Third report* UUK
- Responsive College Unit (2003) *Research into the Comparative Performance of Tertiary Colleges* RCU Ltd
- Roberts G (2003) *Final report of Sir Gareth Roberts' Review* The Stationery Office
- Robertson D (1996a) 'Credit transfer and the mobility of credentials in UK higher education' *Journal of Education Policy* 11.1
- Robertson D (1994) *Choosing to Change: Extending access, choice and mobility in higher education* HEQC
- Royal Society (2003) 'Royal Society's call for a radical review of the UK's dual support funding system'
- Scottish Executive (2004) *A Changing Landscape for Tertiary Education and Research in Scotland*
- Shattock M (2001) 'The academic profession in Britain: a study in the failure to adapt to change' *Higher Education* 41
- Shattock M (1999) 'Governance and Management in Universities: The way we live now' *Journal of Education Policy* 14.3

- Stanton G (2004) 'The organisation of full-time 14-19 provision in the state sector' Discussion paper for Nuffield Foundation Review of 14-19 Education and Training, Working Day 3, 1.4.04
- Stanton G (2000) 'Research' in Smithers A and Robinson P (ed) *Further Education Re-formed* New Millennium Series Falmer Press
- Tapper T and Salter B (2002) 'The Politics of Governance in Higher Education: The case of the Research Assessment Exercises' *OxCHEPS Occasional Paper 6* OXCHEPS
- Ternouth P (2002) *Knowledge Transfer: Towards a strategic framework* CIHE
- THES (2003a) 'Why I think the RAE needs to go back to basics' *Times Higher Education Supplement* 10.1.03
- THES (2003b) 'Ministers fail to halt war of words over dual-support' *Times Higher Education Supplement* 28.11.03
- THES (2003c) 'Give me an A or you're dead' *Times Higher Education Supplement* 28.2.03
- THES (2002) 'Boycott the behemoth' *Times Higher Education Supplement* 17.5.02
- UCAS (2003) Available at www.ucas.co.uk
- University of Kent (2003) *Annual Report 2002/3* Available at www.kent.ac.uk
- UUK (2003) *Funding Research Diversity*
- Warner D and Palfreyman D (2001) *The State of UK Higher Education* Open University Press
- Watson D and Bowden R (2001) 'Can we be equal and excellent too?' *The New Labour Stewardship of Higher Education 1997-2001* Educational Research Centre, University of Brighton
- Watson D (1998) 'The Limits to Diversity' in Jary D and Parker M (eds) *The New Higher Education: Issues and directions for the post-Dearing University* Staffordshire University Press
- Williams G and Brown R (2001) *Funding by Institutional Missions* CIHE
- Zaman M (2004) *Review of the Academic Evidence on the Relationship Between Teaching and Research in Higher Education* Department for Education and Skills