DOCUMENT RESUME

ED 439 222 CE 079 729

AUTHOR	Bellfield, C. R.; Bullock, A. D.; Rikowski, G.; Thomas, H. R.
TITLE	Funding for the Future: Strategic Research in Further Education. A Report for FEDA.
INSTITUTION	Further Education Development Agency, London (England).
ISSN	ISSN-1461-2712
PUB DATE	2000-01-00
NOTE	50p.
AVAILABLE FROM	FEDA Publications, Citadel Place, Tinworth Street, London SE11 5EH, United Kingdom (5 British pounds). Web site: http://www.feda.ac.uk.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Adult Education; *Educational Finance; Educational Research; Federal Aid; *Financial Support; Foreign Countries; *Franchising; Postsecondary Education; Technical Institutes; Vocational Education
IDENTIFIERS	*Great Britain

ABSTRACT

A research study focused on the funding method for further education (FE) in Britain. From a theoretical study of the stimuli built into the new funding methodology, four topics of interest were selected for further investigation. To clarify the arguments, these topics were cast as a series of hypotheses that could then be tested using both national, aggregate data, documentary, and interview evidence from eight case study colleges. Hypothesis 1 was that colleges were subsidizing core provision from their franchising arrangements. Franchising was not without risk, financially or educationally. Franchising has a revealed a divergence in views about what should legitimately be funded as FE. Franchising is used as a vehicle for increasing participation or improving access to FE. Hypothesis 2 was that convergence has worsened the performance of students in FE. Its consequences were seen to be less adverse than expected. Main responses to convergence have been to change the terms and conditions of the teaching staff, and to diminish enrichment and pastoral care. Hypothesis 3 was that tariff farming may have led to greater diversity of provision within colleges. Manipulations of the tariff were rather more talked about than actually done. Hypothesis 4 was that there is greater differentiation within regions than between them. Evidence was not definitive, and the regional funding of FE needed further exploration. (Contains 53 references.) (YLB)

FEDA Further Education Development Agency

Funding for the future:
strategic research in further education

A report for FEDA

C R Bellfield, A D Bullock, G Rikowski, H R Thomas
School of Education, University of Birmingham

Research report

Funding for the future:
strategic research in further education

A report for FEDA

C R Bellfield, A D Bullock, G Rikowski, H R Thomas
School of Education, University of Birmingham

Published by FEDA
Feedback and orders should be sent to: FEDA publications,
Citadel Place, Tinworth Street, London SE11 5EH
Tel: 0207 840 5303 Fax: 0207 840 5401 e-mail: publications@feda.ac.uk

Registered with the Charity Commissioners

ISSN 1460 - 7034

Enquiries regarding research projects should be directed to Andrew Morris, Head of Research and Development.

Foreword

Funding for the future: strategic research in further education

This research report results from a FEDA initiative to support and stimulate research activities in aspects of further education. Following an initial scoping study, proposed by Professor David Robinson for John Moores University, Liverpool, which confirmed the limited amount of research focused on FE issues in general, a decision was taken to finance an enquiry into aspects of FE funding. An invitation to tender was circulated to institutions who had a strong track record in educational research. Following a series of presentations, the University of Birmingham School of Education was selected to carry out work on the impact of the post-incorporation funding methodology in the FE sector.

The invitation to tender encouraged contractors to propose methods of working that involved collaboration with practitioners in the sector. As outlined in the report, the Birmingham team worked closely with a reference group of principals and other senior staff from FE and 6th form colleges. In this way the project achieved a second aim of the strategic research initiative - to foster close working relationships between the post-16 sector and major national centres of expertise in educational research.

Mick Fletcher
January 2000

Contents

Introduction

Widespread and fundamental changes to the further education sector followed the 1991 white papers and the 1992 Further & Higher Education Act (Robertson, 1997). Colleges have faced important issues: developing local networks; balancing local collaboration with competition in new markets; determining strategic priorities; developing flexibility and quality; and organising for cost-effectiveness and economic resource management (Rikowski, 1996). Policy development within the FE sector has continued apace, powered by four key drivers.

- **Enhancing the quality of the nation's human capital.** Recent social and economic transformations to the labour market sector emphasise labour flexibility and quality (Green and Rikowski, 1995). To ensure a world-class labour force, there is a fundamental role for education in general (DTI, 1994, 1995; DfEE 1996a); for the FE sector (DfEE/FEFC, 1995; Kennedy, 1997); and for lifelong learning (DfEE, 1995a; Fryer, 1997). The Learning Age green paper (DfEE, 1998a) identified particular weaknesses in basic and intermediate skills – areas where FE could make a significant contribution. Reeves's (1997) case studies show how colleges can contribute to economic regeneration.

- **Quality of output and coherence of provision.** The FE sector may play a key role in meeting National Education and Training Targets (NETTs). This is underpinned by a range of quality mechanisms, including the FEFC's inspection process; planning framework; timetables; and the Charter for Further Education, with GNVQs and NVQs reviewed and assessed for underpinning quality mechanisms and procedures (Capey, 1995; Beaumont, 1995).

- **Widening participation and access**. The FE sector is integral to widening participation and access (Kennedy, 1997). These aspirations, not only instrumental in raising human capital, should diminish social exclusion and ameliorate the status of the unemployed or those in low-paid and low-skilled work. FEFC (1997g, 1997h) has taken this process forward by providing statistical data and case studies of good practice.

- **Equity and the funding mechanism.** Equity of funding is manifest in several ways. First, Average Level of Funding (ALF) convergence is a way to smooth historical divergence in funding. Second, different types of institutions (school sixth forms, sixth form colleges, FE and tertiary colleges, and specialist FE colleges) may not be funded on an equitable or efficient basis. Third, the Kennedy and Fryer reports signalled the need for funding mechanisms to encourage learning among disadvantaged groups; the FEFC itself has undertaken studies on the access of disadvantaged groups to FE provision (FEFC, 1997c) and introduced a post code factor as an element of funding. This gives modest additional funding to all colleges on the basis of the proportion of their students who are resident in post code areas classified as deprived.

The FE sector serves multiple audiences; a review of the funding arrangements should acknowledge this to reflect the complexity of the sector. Funding mechanisms should seek to:

- have cognisance of the increase in off-site and work-based learning and address the needs of employers and individuals as employees

- encourage flexible learning and acknowledge the very different types of learning or qualifications being pursued, but in a structure that facilitates credit accumulation and transfer schemes (CATS) and new progression routes into higher education (e.g. accreditation of prior learning, or APL)

- relate to the varied needs of a heterogeneous client base (one that includes external customers such as employers and those previously marginalised from education)

- ensure that equivalent courses are funded commensurately and that additional resources are available for those who are disadvantaged.

Researchers and commentators have noted the relative lack of research on FE in general (Cantor et al, 1995; Hughes, Taylor and Tight, 1996; Robertson, 1997) and the impact of the FEFC funding mechanism on provision in particular (Bradley, 1996). Elliott (1996) notes that research into FE has been almost 'invisible' post-incorporation, while Ainley and Bailey (1997) point towards the long-standing neglect of FE colleges as sites for research. This research report aims to address this deficiency.

Set against this have been a series of research investigations by the National Audit Office. From these, Bourn (1997a, 2) concludes: 'The funding methodology has been successful in encouraging colleges to achieve the levels of growth expected of the sector and to make significant increases in efficiency.' Efficiency is not just about more outputs from the same inputs; but to establish that efficiency has improved, we need to know that the quality of education does not diminish commensurately with the growth in student numbers. Our research hypotheses examine this contention from a series of perspectives.

Strategic research hypotheses

We offer four hypotheses for testing that reflect key issues within FE funding:

- To maintain their core activity, colleges have pursued and obtained franchising provision.

- Convergence in the funding formula has worsened the academic outcomes for students in FE.

- The weightings of the funding tariff have led to greater diversity of provision within colleges.

- The variations in funding and performance are greater within regions than they are between regions.

For these hypotheses we draw on national data; data from seven colleges in the FE sector in England; and one case study college and the system of funding for FE in Wales. Each of the hypotheses has been presented as an independent entity and so may be read individually. The hypotheses have been chosen with five criteria in mind. The key issues should be:

- of genuine concern for the FE sector
- properly open to debate
- resolvable or falsifiable with evidence, at least in principle
- manageable within the time frame of the research project
- cognisant of possible future developments to FE funding.

Thus, the hypotheses are selectively chosen; some important issues, such as international comparisons of funding and the economic gains from FE, are omitted from our study.
In deriving these hypotheses, we have taken advice and guidance from a group of FE professionals and from individuals within FEDA. We are grateful for their help and cooperation.

The effects of franchising

Hypothesis 1: To maintain their core activity, colleges have pursued and obtained franchising provision.

Preliminary evidence and context

Franchising (or outward collaborative provision, OCP) may be defined as 'education for students being delivered away from a college's premises by or with the assistance of a third party' (FEFC circular, 96/06, 3). In contrast and put more simply, core work is what a college does with its own staff, typically (but not exclusively) on its own premises. Franchising has been a high-profile issue for the further education sector, raising important questions about mission and purpose, as well as impinging on the efficacy of the funding methodology. Our investigation looks at the relationship between franchising and the core of the college's work.

There are several financial incentives for colleges to undertake franchising:

- Colleges can grow through franchising and can raise extra revenues as surpluses; this arises where colleges have a cost advantage relative to the tariff and so can expand pockets of provision.
- Colleges may franchise to maintain their profile and reputation vis-à-vis other colleges (Leney et al, 1998); the demand-led element (DLE) of funding had allowed colleges to expand with the FEFC underwriting such expansion, albeit at a lower rate of funding.
- Colleges with low ALFs get higher percentage allocations under the bidding process and a higher percentage FEFC contribution to their building projects; these colleges are best placed to expand their franchising (Styles, 1997).

External agencies also have an incentive to obtain franchising agreements, in terms of: income from the FEFC; educative input from the colleges to improve the standards of provision; and accreditation for participants. (As described, this definition of franchising differs from common usage: typically, franchisees pay to use the name and operational technique of the franchiser).

Given these incentives, and the widespread presumption that franchised provision is well-funded under the FEFC tariff, our hypothesis is that colleges have obtained and pursued franchised provision to subsidise their core provision. In order to test this hypothesis, we need to be clear about the quality of and resourcing for franchising for two reasons. First, if franchising is comparable to core provision, there is no need for concern over its prevalence. Second, if colleges cannot make a 'profit' on franchising, there is no opportunity to cross-subsidise the core. However, the core needs to be defined and in a way that is not contentious. We discover below that different definitions of the core reflect a fragmented view of the mission and purpose of the FE sector.

On quality, the FEFC (1997d, 8) cite inspection evidence of 'no inherent weaknesses in franchising as a mechanism for the delivery of vocational education and training ... [or with quality assurance, if] senior management commitment, resources and monitoring arrangements are in place'. On resources, the FEFC, against an underlying perception that franchising is lucrative, does recognise that considerable effort is needed for quality assurance, particularly when the franchising is off site.

On the core, Kennedy notes a 'lack of vision informing clear strategic priorities has led to the danger of a fragmented sector, split between [inter alia]: franchising versus direct provision colleges' (FEFC 1997e, 97/31, Annex A, 5) The circular also observes that 'the funding methodology could be amended to encourage collaboration rather than competition between institutions. This could be a more effective strategy for reaching those who do not at present participate in further education.'

To test our hypothesis and explore questions of quality and core, we draw on national data and then on information from visits and data collection at eight case study colleges. In turn, this leads into investigations of:

- what use colleges have made of the opportunities and revenues from franchising
- whether or not franchise provision should be funded, and if so, on what terms.

Our methodology reflects our belief that both aggregate and individual college data are valuable in exploring issues of FE funding. There is considerable data at the national level, and this is useful for exploring trends. However, to understand and analyse the effects of the funding formula, we have sought the views of college professionals and documentary evidence from our case studies.

Findings from the aggregate data

The national data is a useful starting point to establish the growth of the sector and increases in the diversity of funding. Table 1, below, indicates the scale of collaborative provision. At 700,000 students (the majority of them part time) collaborative provision represents 10% of all provision (as registered in terms of funding units).

Between 1994–95 and 1996–97 franchise enrolments rose sevenfold; more than 280 colleges are involved in franchising, although 20 of the largest franchisers provide 58% of total franchised provision (FEFC, 1997d). Franchise enrolments are clustered by subject, notably in health and community care, IT/computing and sports. Most franchise provision is at on-entry or level 1 and may be with private or public sector employers, schools, sports bodies or community associations (FEFC, 1996, 6).

Table 1 Growth in franchising or collaborative provision (CP)

	CP (millions)	CP total students	CP FUs (millions)	CP FUs/ total FUs
1994–95	0.1	5%	3	2%
1995–96	0.5	18%	12	7%
1996–97	0.7	19%	17	10%

Source: (FEFC, 1997a)

The national data suggests two points. First, franchised provision is different from the rest of FE provision in terms of student body, curriculum and level, and the significance of this difference needs to be investigated. Second, franchising has created a cluster of around 20 colleges that, in terms of national statistics, are unlike the remainder of the sector; this dissimilarity may undermine notions of a common FE sector being well-served by a common sector-wide funding methodology. As Gravatt (1997) notes, however, detailed aggregate information on franchised provision is hard to uncover. Given the scale and growth of the activity and concerns about its nature, distribution and scale, the limited volume of publicly reported national data is a matter of concern and perpetuates suspicion about quality.

Findings from the college data

Using data on college provision from individual colleges is informative. Of our eight case study colleges, two undertake no off-site franchised provision; five are small-scale franchisers; and one is involved in large-scale franchise provision. This reasonably mirrors activity in the sector as a whole. Our analysis of the data and other relevant information suggests that the franchise market may be segmented into three groups: large-scale franchisers; opportunistic franchisers; and strategic (non-)franchisers. We describe these practices in more detail below. We then consider the quality of franchise provision and the effects of franchising in fragmenting the sector.

College franchise activity

The colleges that did not franchise averred that franchising was contrary to the mission of the college. It was argued that their strategic direction militated against franchising, both in terms of students ('our target group is not amenable to franchised provision') and staff ('if the college had wanted to franchise, we would have selected our staff complement differently'). As evidenced from the other case studies, however, these arguments do not preclude small-scale franchising. It may have been, rather, that these colleges were able more easily to forgo the additional income from franchising through a confluence of positive circumstances:

- changes to the local demography with increasing enrolment from a greater catchment
- a relative windfall fund when the demand-led element ended
- introduction changes in the work load of staff.

For the small-scale franchisers, mission is important and guides the type of franchising done. Perhaps in consequence of this, the motives for each case of franchising by these colleges were idiosyncratic. At the college in Wales, the emphasis was on supporting local provision and, despite competition between colleges in previous years, this was a view held by the neighbouring colleges. In fact, the college had only one franchise contract with the Local Education Authority for adult non-vocational work. The volume was modest, representing around 5% of total college income.

At one of the general FE colleges in our study, early franchising had been lucrative, but it was soon realised that high-quality franchising required a resource commitment as great as on-site provision. As a result, the college has developed a high-quality work-based learning programme. Because it is off site, this might be thought to be similar to franchising except that the college's own staff worked with the workers. At a second college, despite opportunities for negotiated franchise deals and a broad subject complement, only a very small proportion of franchised provision was undertaken (around one-fiftieth of the total provision). This college preferred endogenous growth, but it is also clear that senior management had not anticipated that franchising would last. The third general FE college regarded franchising as part of a local imperative for widening participation and exporting its educational standards to external agencies.

Some colleges were opportunistic in their adoption of franchising on a small scale. One college had franchised in order to increase the total units and so reduce the college ALF. One sixth form college was franchising a small amount of provision with a national provider of first aid. This provision, that appeared relatively lucrative, would be used to 'buttress the mission'. This college's imperative to franchise depended on the potential for growth through other sources. With growing enrolments and more healthy 16–19 provision than for some years in terms of enrolment and student in-take characteristics, the college acknowledged that, in terms of the funding method, this was 'growth in the wrong area'. Franchising was, however, a low-risk opportunity to increase resources to the college at the margin.

The motives of large-scale franchisers are more problematical. It may be possible for such colleges to argue that they have 'always had partnerships in the community' and that franchising is just a change of name and funding arrangement, as was argued by the large-scale provider we interviewed. For others, franchising is seen as a legitimate substitute for 'traditional employer day-release courses that were the back bone to much of "old" FE' (Leney et al, 1998, 27). However, this argument cannot be invoked for the nature of much of the rapid growth in franchising over the past few years. More legitimate may be the argument that such colleges are 'creating access' for groups, with franchised provision a valid part of the FE remit despite its atypical profile.

The large-scale franchiser in our case studies had encountered significant management problems because of alterations to its applications for funding. In negotiations with the FEFC, the college has criticised the failure of the FEFC to understand and accommodate its mission and the abrupt withdrawal of DLE funding. The college has cancelled provision and had to consider either merger, rationalisation of its provision into the local area or conversion of franchised provision into directly funded work.

Ensuring the quality of franchised provision

One main reason why some colleges reject franchising is concern about quality. The belief that franchised provision is lower quality than on-site provision is widespread, and concerns have not been allayed by evidence from the FEFC. One sixth form college was pulling out of its community work 'with concerns about quality'. Even where franchising was done on a large-scale, it was acknowledged that some has had to be abandoned because 'there was no genuine interest in the students'.

Most of the opinions regarding franchising were pejorative, even from the large-scale provider college. Little reference was made to the fact that such provision might be the most suitable for NVQ provision, which involves on-site assessment as a large element (Gravatt, 1997, 10). This omission is partly because the composition of much franchised work is at a low level. The NVQ argument is also not easy to maintain if, at the same time, the college is aiming to improve participation of non-traditional groups, because employees receiving training are not likely to be among these groups.

Another argument about quality was that curriculum development is often instigated by the course lecturers, who are infrequently in contact with the franchise college; continuous improvement in the curriculum is therefore 'hidden' from college management. Similarly, good-quality provision is likely to arise from knowledge of the students, and few colleges could give information about students on franchised programmes other than that from administrative records. Little is known, for example, about whether or not the colleges are satisfying the aspirations of these students. It may also be hard to get learning support to students who are geographically distant from the college or have little affiliation to it.

Finally, it might be noted that growth, much of which was franchised growth, was for a time funded at the demand-led element price of £6.50. This figure is substantially lower than the Average Level of Funding at which colleges were expected to provide, leading some professionals to conclude that franchised provision must therefore be receiving lower resource than core provision. However, this argument cannot be pushed too far: franchisees may have been contributing some of their own resource (such as the instruction site) to the training or education. The demand-led element funding may have been the amount of subsidy from the FEFC; this is not the same as the total resource input. Hence the quality of the franchised provision may be comparable to that of the core.

To ameliorate concerns over quality, some colleges developed rules about the types of franchising they will undertake. These include franchising only to local providers; only on a small scale; and only for courses that fit conceptions of further education across the sector. Elsewhere, franchising was undertaken by staff who, at the least, were trained by the college.

Such rules could, however, be used to 'dress up' franchising, making it appear less opportunistic and more strategic. Given the incentives for external agencies to seek FEFC funding for their courses, there is, as one principal put it, 'a ready market for units'. This ready market may help colleges that are under their target funding units for a given year to reach such targets. However, this type of provision may be less likely to cohere with the college mission. At present, there is no obvious way of distinguishing these 'top-up franchisers' from more 'mission-focused' franchise arrangements.

However, the argument that franchised provision is inferior to other provision is hard to sustain across the board (Report of the Education and Employment Committee, 1998, xxxv). Moreover, it is not, of course, a shared view and the large-scale providers feel justified in defending their provision.

Several arguments were advanced. Employers may coerce greater commitment to learning from their participating employees. For social or community groups and for those on sports courses, the desire to learn may be greater. One college professional also argued that franchising has spin-off benefits, such as better links with employers and so closer job placement links. However, there was little general support for this argument, even among those more involved in franchising. Progression might be improved through franchising. Given the typical provision that is franchised, however, it may be a doubtful argument. One college acknowledged that some franchisee institutions were averse to such progression, preferring to keep the students as part of their own client group. Elsewhere, geographically distant provision made progression through the original college unlikely.

Moreover, some of the case study colleges expected franchising to be a short-lived 'cash cow' and regret not having seized more opportunities. These colleges might then have softened staff cuts over the medium term. Implicit in this is the assumption that franchised provision is not significantly inferior to mainstream provision (but is in fact a missed opportunity) or that the effects on the college would be minimal.

The problem may also be less the quality of the franchising, than whether or not the colleges and FEFC can measure quality in franchised settings (Wymer, 1996). This has been one of the constraints on the growth of franchising at particular colleges: college staff do not have the competencies to assess quality in a franchised activity. For the FEFC, inspection of the franchised provision may also be difficult. One principal did concede that quality control of franchised provision was 'notional' at the early stages of franchising; colleges were not able to control quality.

The evidence from the case studies also reveal context-related issues that may impact on quality:

- Franchising is 'terribly volatile', a finding noted not only by large scale franchisers. Both the numbers of franchisees with which the college must deal, and the units accruable, were volatile. For one department at a college, the number had halved between one academic year and the next; at another, franchisees were often changing, with the resultant income fluctuating between 2% and 8% of the total. Although there has been curtailment of the growth of franchising in terms of units available, one principal was certain and many others were confident that the growth of franchising could still be very significant.

- Benefits from franchising have failed to materialise. The extent to which small-scale franchising is lucrative is moot: there are significant economies of size in franchising (not least because of the high initial contracting costs), and two colleges thought that provision below 50k units was not likely to be profitable. At the college that had developed a large-scale programme of work-based learning, it was argued that quality franchising required a resource commitment as great as on-site provision. (This was a college that had already been commended in its FEFC Inspection Report for its extensive and varied links with employers and its established and carefully managed work experience programmes.) At other colleges, those professionals who had directly managed franchising had argued that it was 'not cheap'. For one department head, franchising in conjunction with another college across a range of subjects was not lucrative; very little of the surplus accrued to his department.

- The opportunity to deploy funds as fixed capital or circulating capital depends on whether or not the increase in funding is temporary or permanent. It may not be possible to deploy such funding in a way that does not bring a string of liabilities in the longer term.

In summary, there is anecdotal evidence that franchising may be used for cross-subsidy by some of the large-scale providers and this amount of cross-subsidy may not be insignificant. Nevertheless, for many colleges, the amount of franchised provision is marginal and the 'profit' earned on such provision is also likely to be small.

Given the small scale of franchising at many colleges, it was unlikely that sufficiently substantive cross-subsidy could be undertaken. For these small-scale franchising colleges, which make up more than 80% of the sector, franchising cannot subsidise core provision to any significant degree. Not only is the provision marginal, there are significant constraints on its growth. Some of this may be explained by (or more cynically 'dressed up' as) mission, and there may be virtues in easing the financial squeeze on colleges without deflecting from the core business. However, it has been possible to identify several constraints on franchising and some adverse contextual factors.

Franchising and fragmentation

So far, we have assumed that the notion of a core of provision is uncontentious. However, this is not the case and a definition has not proved easy to maintain. This is primarily because one effect of franchising has been to fragment the sector: no common, sectoral mission exists against which a core and periphery can be counterpoised.

The sector has been divided into those colleges that franchise and those that do not. It is clear that the position of the 20 or so colleges that undertake large-scale franchising is evidently different from the rest of the sector. This is per-college fragmentation. As well, franchising has indicated a schism in the perceptions of the FEFC and the perceptions of the colleges about the mission of the FE sector.

Fragmentation between individual colleges has arisen because of clashes in the missions of the college and their views of further education. Franchising, with its particular weighting toward level 1 provision, may in fact exacerbate the differences between sixth form colleges and other FE providers; the former believe their core purpose to be GCE A-level. Moreover, it is a partly optional activity that is 'led from the top': the stance taken by the senior management team on franchising may therefore have implications for college ethos. Many colleges orient their provision to serving the 'local community'; either large-scale or 'top-up' franchise provision may be discordant.

As well, there has been fragmentation between staff and the management of colleges. One of the concerns about franchising is the lack of control over staff involved in franchising and their separation from the college. One curriculum manager acknowledged that the 'college did not [even] like using agency staff'. Some lecturing staff regarded franchising as 'expedient' or 'opportunistic' (a view generally found at colleges in Wales). In addition, franchising activities may be recasting the college staff as course validators. When pressed directly on this, college staff pointed that this would 'negate the role of the college'. For franchising to be worthwhile, the college would have to 'add value'; this exact phrase was used by two of the principals who engaged in small-scale franchising.

The competitive element introduced by franchising does not seem to have materialised. One college did consider that its motivation for franchising was lessened by the behaviour and the relative expertise of other colleges in the area. For the sixth form colleges, which are minimally involved in franchise provision, competition is against each other and against schools. For colleges interested in strengthening their position against schools, franchising is unlikely to have attractions beyond being a source of revenue. Given that the growth of franchising has bypassed GCE A-level provision, the income from such franchising is unlikely to reduce the inequity in funding compared to schools, one of the clearest complaints from principals (Graham, 1997, 556). Franchising seems unlikely, on this evidence, to figure in a college's competitive strategy.

Franchising may have exacerbated other resource tensions. As one of the principals observed, franchisers are more likely to approach some types of college than others: sixth form colleges, with the greatest similarity to schools, were thought less likely to be approached. Hence franchising represents another source of income, which, like other marginal sources of income (European Social Fund, Widening Participation funds), varies according to college type. In comparison with these other income streams, franchising may also have been a more ready source of funding. Bourn (1997a, 2) finds that 'colleges have not succeeded in increasing their levels of funds from private sources'; enrolment between 1994–95 and 1995–96 fell by 9% for students funded by other agencies.

What some colleges now regard as the missed opportunity of franchising also reflects on how colleges have interpreted not just their own missions, but also the position of the FEFC. This results from diverse interpretations of the FEFC's policy drivers. Two examples may elucidate this: first, some principals were not certain why the FEFC would wish to support franchising; and second, without FEFC guidance, some colleges were uncertain about how to grow and what would happen if they did not grow. Indirectly, the Education and Employment Committee (1998, ix) recognise this issue in asserting that FE 'has now reached the stage where the Government now has to make choices and explain its priorities. The key point is that criteria for the allocation of public money to further education should be made clear.'

From the evidence of college professionals, there was disagreement over whether the FEFC encouraged franchising or not. Others thought that the FEFC was ambivalent about what should be bought with FEFC money (as reflected in Circular 96/06, 3), beyond setting its willingness to pay for elements of provision. That the FEFC should be ambivalent was not a view generally shared. One professional argued that the FEFC should have a role in encouraging people to do the qualifications that the government thinks they should do.

However, precisely what the FEFC should buy is a more contentious issue. Even classifying FE provision into three broad types – academic, vocational and community work – there was no ready presumption about which was most legitimate or what should be proscribed. Moreover, given the entrepreneurial and responsive face of FE ('operating at the interstices of economic change', as one principal put it), it seems unlikely that there could be such a consensus. It is hard to present the sector as responsive while also defining beforehand what the sector should or should not provide. Although there was no ready consensus over what should be done, there was more clarity over the burden of payment. The general feeling was that there had been some subsidy in the provision to business, perhaps for training they would anyway have undertaken. Such franchising took money away from the core mission of colleges, resulting in even greater divergence of funding against other providers.

Conclusions

Our evidence supports several conclusions. First, franchising is not without risk, financially or educationally, and both are likely to check the growth of franchising for some colleges. Franchising, even for the small-scale providers, is volatile in terms of scale and in terms of quality. Second, franchising has revealed, if not a 'lack of vision informing clear strategic priorities' by colleges, at least a divergence in views about what should legitimately be funded as FE. Concomitant with this, franchising has further fragmented the sector, because the opportunities for franchising were not spread evenly in the first instance, and franchising has been cumulative, with large-scale franchisers growing larger. Third, franchising is used as a vehicle for increasing participation or improving access; small-scale franchisers welcomed this franchising opportunity. Yet this form of franchising is not particularly favoured in the funding method: funding for a franchise is independent of the amount of effort expended in obtaining the franchise. To some extent, this will bias franchising toward 'top-up' purchasers and away from colleges overtly seeking to franchise in such a way as to provide a first step of access to education for marginal groups.

There may also be a concern over a funding method that stimulates short-term opportunities to obtain extra funding. Colleges are pressured by competition into franchising, where not only are there legitimate concerns about how to ensure good quality of provision, but there are also uncertainties over the extent to which such activity will be funded. In Wales, where franchising has been much less pervasive, the cap on funding has emphasised the link between more money for franchising and less money for mainstream or core provision.

During the more expansive franchising period of 1995–97, when the revenues from franchising were as uncertain as the costs, franchising may have been destabilising, in that the funding method may have changed dependent on how the colleges themselves behaved. In other words, if a large number of colleges franchised, the funding method would have to accommodate this new scenario and do so in a way that might disadvantage the colleges that did not franchise. One principal was explicit that the college policy on franchising had largely been decided by second-guessing the FEFC's response.

There are several responses to franchising but, fundamentally, it must be ensured that franchised provision is subject to the same quality requirements as on-site provision. The FEFC inspector's Report for 1995–96 observes that franchising is likely to run into difficulties: when undertaken hastily; when atypical of the core provision of a college; when the franchise work is at a distance from the college; or when the provision is large scale. At present, all of these options remain open. In Wales, there has been suasion against franchising and colleges are only allowed to charge a 10% mark-up on any franchised provision. The returns from franchising are therefore lower in Wales.

Beyond this, any other responses may be more debatable, as they will reflect judgements about the relative merits of different programmes. Cuts in funding to franchised provision or capping the amount of franchising (as proposed to the Education and Employment Committee, 1998, xl) may be hard to enforce, since colleges can often circumvent the rules. Moreover, this will actually reduce the less profitable forms of franchising, despite the concerns being mainly over the most profitable forms (Styles, 1998, 2). Other options, which face the same criticisms, include: funding franchising only after a lag; only when it conforms to the college's own cohort; only when it is within the local region; or at a diminishing rate per size. Another option, narrowing the curriculum (also suggested by Styles) would have the benefit of both clarifying what the FEFC regards as publicly fundable and permitting restrictions on some forms of franchising.

Much of the sector appreciates and welcomes new markets in FE being opened up. These are a reflection of the creativity and dynamism within the sector, and new forms of provision should not be automatically regarded as problems for the sector to solve. Yet, as the experiences with franchising clearly indicate, detailed prior investigation is needed as to how such market needs are to be met. Otherwise, the sector will be repeatedly surprised by the responses of colleges to changes in student needs, funding formulae and regional circumstances.

The effects of convergence

Hypothesis 2: Convergence in the funding formula has worsened the academic outcomes for students in FE

Preliminary evidence and context

Convergence in FE funding for individual colleges has been an important policy imperative that has received much attention. In its fundamental review of the funding methodology, the FEFC (1997, Annex A, 8) concludes that it should be 'capable of promoting a policy of convergence' and 'seeking equity of funding, that is, institutions should receive the same funds for the same student with the same characteristic studying the same qualification'.

In practice, convergence has meant that relatively well-funded colleges have had to reduce their Average Level of Funding (ALF) to the median for the sector as a whole, and under-funded colleges have had to converge upwards. Hence convergence, either through changes in the level of resource per college or through concomitant changes in the scale of the college, has not been neutral in its effects. It has prompted (sometimes large-scale) reorganisation and restructuring, which, insofar as they are responses to reductions in funding, might be expected to have had a deleterious effect on colleges' performance. Our hypothesis asks, therefore, whether or not convergence in funding has worsened the academic outcomes for students in FE and if so, in what ways. In that respect, we apply a wide definition of outcomes and include academic performance and its assessment, continuation rates, enrichment (pastoral care) provision, contact time, and measures of student satisfaction.

Official publications have found encouraging evidence on academic performance. The FEFC working group concludes that 'the funding methodology has generally been fit for the purposes of growth, convergence and relative stability' (FEFC 1997, Annex A, 9). In their assessment of the FE sector, the National Audit Office maintain that there has been little effect on performance from changes in funding (Bourn, 1997a). They find: 'no substantial differences in quality between types of college' and 'no evidence that the quality of teaching and learning has been affected by the colleges' individual funding levels'; 'no statistical relationship between average level of funding and financial performance'; and, based on a comparison of inspection grades, 'no evidence that the quality of provision has been affected by colleges' average level of funding ... teaching and learning and students' achievements are of similar quality throughout the range of college growth and financial performance'.

There has been criticism from professionals and commentators within the sector, however (Gravatt and Sorrell, 1996; Hemsley-Brown, 1997; Nash and Russell, 1997; Russell, 1997a, 1997b), but this scrutiny has so far produced inconclusive results. Graham (1997) finds only limited effect on staff, but does note that teaching staff feel 'they really have got to get the students in'; for the students, Graham finds little to no effect. Our investigation into convergence explores these issues further. To test our hypothesis, we use two data sources. First, we examine national college-level data. Second, we draw on visits to eight case study colleges; these were selected to include a range of college types, regions and sizes.

Findings from the aggregate data

Here we used national aggregate data on colleges to explore the relationship between convergence and outcomes; we tested for correlation among all colleges in the sector after an initial analysis that yielded no evidence that results are sensitive to college type. We define converging colleges as those that experience a fall (rise) in their ALF from a higher (lower) than average ALF. For the sector, the average of the changes in ALF between 1995 and 1996 is –£0.74, with a range of –£8.49 to +£13.80. These changes may be compared with various measures of academic performance.

First, we look at a performance indicator of student achievement ('learning goals and qualifications'), i.e. the percentage of qualification aims achieved. The average of the college-level changes in aims achieved between 1995 and 1996 has been 2.77%. Prima facie, convergence has been accompanied by an increase in the percentage of qualification aims achieved. Table 2 includes a measure of the correlation between the change in aims achieved and the change in ALF; it is negative and not statistically significant. This statistic does not support the argument that performance has worsened with convergence of funding.

Second, the ability of colleges to retain students on their programmes will depend on a range of factors, and some of these will relate to the quality of programmes and the support provided to students. For this reason, it is appropriate to use student continuation as a performance indicator of programme effectiveness. Full-time (part-time) average retention rates fell between 1995 and 1996 by 1.5% (1.6%). One test of whether convergence of the funding formula has impaired outcomes would be the correlation between the fall in ALF and the full-time (part-time) retention rate per college. From Table 2, we can see that although no pattern emerges for the part-time retention rate, there is a statistically significant positive correlation between a change in the ALF and a change in the retention rate. Falls in the ALF are associated with falls in the retention rate.

Table 2 Correlation between the change in ALF 1995–96 and performance measures

	correlation	significance test level	n
Change 1995–96 in:			
aims achieved	–0.0205	ns	388
full-time retention rate	0.1094	*	397
part-time retention rate	0.0517	ns	410
total retention rate	0.1021	*	389

* >5% significance; ns not significant

Third, we look at the proportion of full-time (part-time) students who are full year, another measure of the ability of the college to retain students. For this statistic we use cross-sectional information, i.e. the correlation between the absolute level of ALF in 1996 and the absolute proportion of full year students. This correlation is positive and statistically significant (at the 1% level): full-year students, either part-time or full-time, are correlated with the absolute level of ALF. It may be possible to infer that declines in the ALF will also lead to a fall in the proportion of full-year students.

Looking at the inspection grade data, no substantive relationship emerges between the inspection grades of colleges and their per unit funding (Belfield, 1998). There is evidence, however, that the inspection grades vary favourably with the scale of the institution: for a given college type, larger colleges receive higher inspection grades. This finding may suggest that the volume of funding is more important than the ALF, and conclusions based on the relationship between inspection and convergence as measured by the ALF may therefore be misleading. Regarding achievement of the funding target as a performance indicator (used as an indicator of effectiveness by the FEFC, 1997f), again there is prima facie evidence that convergence has not been accompanied by worsening performance. This indicator is negatively correlated with changes in ALF: colleges with falling ALF are more commonly improving their achievement of funding targets.

The statistical evidence from all these indicators is not compelling for several reasons. First, the result may be spurious, with the correlation capturing a mutual but extraneous separate effect on the independent variable (both outcomes and funding may be dependent on demography, for instance). It is possible that measurement at the level of the individual college is not appropriate. A more rigorous test would be to split the colleges into those converging up and those converging down, in terms of ALF. Our functional form may be incorrect: Appendix 1 tests the hypothesis using regression analysis, but again this is inconclusive. Second, the result may be sensitive to the academic year under study, lagged or trend data may be more appropriate; such data is not yet available. Third, the measures used may not be adequate measures of either convergence or performance, although several measures of performance have been included here.

Overall, these methodological problems are significant and may be sufficient to invalidate any inferences drawn from statistical analysis of the national data; this applies both to our results and those of Bourn (1997a). We now consider a different method for investigating the effects of convergence.

Findings from the colleges

We selected eight case study colleges to investigate whether or not convergence has impaired performance in ways that cannot be captured at the aggregate level. These case studies involved data collection from individual colleges and interviews to investigate the relationship between changes in the amount of resource and changes in performance. As well, changes in process were investigated, recognising that the effect of convergence may occur over the longer term, with its preliminary effects on the quality of the inputs to the education process. We summarise the views about convergence and organisational responses to it. We then consider its effects.

Opinions on convergence

At the conceptual level, opinions were divided about convergence. Some regarded it as fair and perhaps contributing to clarifying funding mechanisms (at least in theory). One department head commented that one 'cannot argue against it'; another described it as 'very fair'. However, others described it as 'madness' and a 'fictitious measure of efficiency in that it measures the inputs and not the outputs'. At one of the large city FE colleges, convergence was linked to the rapid reduction of the ALF for the college, with 'no doubt of a major effect' in organisational restructuring.

Regarding practical implementation, college professionals were, in private, surprisingly positive. (It might be noted here that these perceptions are predominantly those of the college principals; the views of other staff need also to be sought as these are, based on our informal soundings, likely to be less positive.)

One principal was prepared to maintain that convergence, which for that college meant a cut in funding, 'legitimised hard decisions' about resource deployment, as well as centralised management power. The curriculum manager at one of the sixth form colleges also conceded that some of the courses were ready for abandonment and, had a greater focus been put on the curriculum in the early 1990s, would have gone earlier. Another curriculum manager thought that it would be 'hard to prove that this has been other than an efficiency gain'; here the term efficiency is used appropriately, and not as a euphemism for 'cuts'. At this college, the A-level pass rate had risen 8% between 1993 and 1997, despite a reduction in funding and an increase in student numbers (yet this rise had only preserved its rates relative to the national average). Staff at one inner-city FE college responded that, although there has not been much improvement in examination scores, the college does 'seem to be delivering the same or more for less'.

Less surprisingly, colleges that converged upward expressed concern that convergence had not advanced sufficiently quickly. At one of the case study colleges, the real ALF had been £14 in 1994–95 (lower than the sector median). The college had then decided to increase student numbers via demand-led element funding, at the lower rate of £6.50. Calculating the out-turn ALF in terms of the core, margin and DLE, the ALF fell to £11.50 (1995–96) and then £11.20 (1996–97). This college's ALF remained low, therefore, and, despite the policy imperative, divergent from the median ALF.

College professionals also observed that convergence, which appears on this evidence to be less contentious than might be expected, had absorbed an unduly large amount of the sector's time and energy. It was pointed out that convergence in FE in Wales had been completed some years ago, and many felt that extended convergence exacerbated the adjustment problems for colleges and maintained uncertainty about the future. Similarly, schools faced funding convergence during the 1990s and had made any necessary organisational changes. Once convergence has been achieved, it was argued, serious debate about resource allocation based on differing needs could begin.

Organisational responses to convergence

The case study colleges had adopted three main approaches (and two lesser approaches) toward convergence. Each of these may have affected outcomes, albeit indirectly.

First, the terms and conditions of service of teaching and lecturing staff had been tightened through new staffing contracts and the staffing complement altered in various ways. This had happened across the range of colleges, except for the college that had seen its ALF climb. One college estimated the reduction in staffing levels to be about 20%. Reduction in contact hours, by freeing up the timetable, was important in facilitating the new terms of staff. As well, there have been changes in the type of employee; introduction of agency staff; longer college year; and flatter management structure and academic hierarchy. Changing the staff complement, noted one Head of Construction at a large general FE college, has made the system operate more flexibly and the variety of staffing responses across the colleges generally supported this argument. Many professionals were candid about the inefficiencies of the past and thus did not press the case that FE had been decimated by cuts in funding. (Looking at the staffing budgets of colleges, however, suggests that the percentage spent on staff has increased since 1993; in part this reflects an increase in non-teaching staff wages. Elsewhere, staffing expenditures had grown and were projected to grow at a lower rate than total expenditure).

Nevertheless, three significant caveats might be inserted here. Senior management did express concern about their ability to hire in the future and to retain staff: illness, absenteeism and resignations were on the increase and, with staff 'poorly paid', recruitments were dwindling (even at the more affluent case study colleges). As well, professionals across the spectrum of colleges were keen to point out that there was bound to be a 'fatigue factor' in staff cuts and that this may arrive soon; cuts could be absorbed in the short term but prolonged cuts would affect teaching quality. There was scepticism about whether further cuts could be absorbed. At one of the sixth form colleges that had not been drastically affected by convergence, the next couple of years will be key in testing how the college can absorb the cuts in funding.

As a general example of this reorganisation, the construction department at one large FE college had reduced the number of hours per course, established harder contracts with the teaching staff, and changed the tasks of the staff (streamlining provision and increasing group size). By these methods, the department had managed to achieve a cut in costs of around 40% without apparent reductions in quality. Nevertheless, these staffing reorganisations have created their own costs in the medium term, particularly in staff development costs. This was noted particularly at the larger-sized inner-city FE colleges. Elsewhere, movement of staff in response to changes in the funding formula is not readily practicable; closures of courses (either A-levels or vocational qualifications) were facilitated by changes in the staff complement.

Second, enrichment and pastoral care has been 'eroded' or 'curtailed'. One general FE college reporting that it had cut down the number of events it ran. At a sixth form college, enrichment had been formalised and, although in some cases the resultant provision had improved, in others the essence of enrichment as a discursive, informal education with autonomy for the teaching staff had been undermined; 'pointless' energy had been expended in classifying enrichment as accredited learning. At one of the sixth form colleges, the reduction of the ALF had 'pinched' pastoral care, but it was felt class sizes were still sufficiently small that staff could not reasonably complain. For the specialist vocational colleges, reduction had not been an option and with expansion into NVQs, enrichment had not been a concern either.

The third organisational response was to increase group size. This occurred at the vocational colleges and at the sixth form colleges; only the college that had been converging upwards in terms of funding resisted this change. (All of the colleges we visited in England had a staff-student ratio greater than the case study college from Wales). However, the opportunities to change group size differ by course. At the specialist vocational colleges, it was argued that there were health and safety regulations on maximum group size. Furthermore, access to equipment was much harder to ensure for vocational, apprenticeship work; skills acquisition courses do not lend themselves to significant increases in group size. There may also be less scope to change the content of the courses because of regulation stipulated by professional or awarding bodies. At the sixth form colleges, holding group size constant was mentioned as a significant achievement.

Two other organisational responses were found at several of the colleges. At one, two colleges merged to absorb the effects of a cut in funding of around 30%. This merger was essential in order to 'get to a critical size for a general FE city-centre college'. As this college then became one of the largest colleges in the sector, economies of size in provision were thought to be substantial. At some colleges, management delayering had been undertaken; at one specialist college there had been a relayering effect, with lecturing staff taking on administrative responsibilities. Efficiency gains have also been sought by reducing the overhead costs of administration, although activities have not declined. Even at colleges where downward convergence has not been a factor, there has been a shift toward cost-recovery courses from fee remission. These strategies obviate the need for minimum group sizes to be introduced.

Generally, convergence did not appear to have generated any change in the curriculum, although there has been some better matching of students to courses. At one of the sixth form colleges, the impact of the ALF has been to rationalise its organisation rather than to diversify it: the offered provision is still the same in terms of subjects. Even at the largest inner-city FE college in our case studies, however, there was not much scope for streamlining the range of provision except on some part-time courses.

Outcome changes

Having considered process changes, we now consider outcome changes at each of the eight colleges. Here we investigate why outcomes may not have been influenced by convergence.

First, examination score outcomes may have been cushioned by students' adjustments to changes in resource levels. As resources were constrained, some students shifted work to home environments, although this was most likely to be effective for relatively well-off students studying academic courses. Students who learn using lab-based practical assignments or who are from poorer backgrounds may have less opportunity to substitute their own resources for those of the college.

Second, value added by colleges may have altered within a changing student demography. If the quality of students on-entry is improving, this would lead to higher academic performance even as a college is converging downward in ALF. Staff at one general FE college recognised that, because of improvement in its reputation, the college's funding problems have not been so acute; one of the sixth form colleges also acknowledged this effect. However, in general, the complaint was that students' characteristics on-entry were, in fact, getting worse, as perhaps may be reflected by more entrants at lower levels. These effects, whether substantive or illusory, compound the problem of measuring whether or not quality has changed. They also prompt speculation that academic outcomes have been unaffected either by falling resources or by lower-quality student input.

Third, student satisfaction may have fallen. However, as students in larger classes have little to compare their provision against, evidence in terms of changes in student satisfaction scores is hard to find. One principal was sceptical that student satisfaction surveys could be used as evidence for such a hypothesis: at that college, complaints about the physical resources had risen, yet the college had spent proportionately more on these than other items in the recent past. Changing tastes and expectations of students would have to be incorporated into an analysis of satisfaction scores, and this would require complex modelling.

Finally, some elements of the tariff may, in fact, have enhanced some of the more tractable and easily identified outcomes. In one college where student retention had been a concern, rates have improved as a result of awareness raising across the college. More reviewing and reporting on progress in year 1 occurs, bringing problems to light early.

Conclusions

It is hard to find evidence that student outcomes have significantly worsened with convergence. Although the national data, which yields no obvious relationships, may not be robust, college-level data indicates that reorganisation has fallen largely on the teaching and lecturing staff, with other adjustments such as reductions in enrichment and group size. We draw some conclusions from this below. Nevertheless, our discussion of the difficulties of measuring outcomes suggests that caution is warranted when generalising about the effects of convergence.

First, the changes described above help to explain why **effects of convergence on academic performance are not evident from the national data**. It should be noted that both the first and second of the organisational responses – tighter staff contracts and the erosion of enrichment – are unlikely to affect examination scores in either the short or the medium term. Study of national exam score data may, therefore, be premature; a prospective indicator of the outputs from FE would be the quality of the inputs or changes in the process (e.g. lecturer standards or course hours). The immediate effects of convergence might be more evident when considered in terms of student experience rather than performance. Staffing issues should also be investigated. As well, intelligent management responses to convergence have been partly effective in softening its effect on outcomes.

Second, **many of the principals did not find fault with convergence** per se. Instead, the problems of convergence arise in conjunction with where they started from and the speed of convergence. Both sixth form colleges in the study indicated the importance of the historical quantum that the college had received on incorporation, a view that corresponds to the findings from the Committee on Education and Employment (1998, x, xxxi). At one of the colleges, the historical quantum was substantially discrepant because of the classification of the student body, which was also the case at the colleges that were converging upward. At the other, financial health had been maintained and convergence had been phased through, partly by making the adjustments other colleges had made, but early on in the process to convergence. But there was a view that the historical funding had been aberrant and the problems of convergence had followed from that (see FEFC Council News, #41). For sixth form colleges there was also a concern that the resource deficiency against schools had widened with convergence.

Third, **scale issues affect organisational response**. Convergence requires sometimes substantial operational changes to college provision and it remains unclear how much operational change can be undertaken and what it can achieve. For example, two of the case study colleges had been involved in negotiations for merger: one had been successful and the ALF had been reduced as a result; the other had not (on mergers, see Chadwick, 1997). Even for the successfully merged college, the gains from restructuring did not fully solve the college's need for convergence.

More importantly, **convergence presumes that the optimal size of colleges in the FE sector is uniform**. Our evidence suggests that this is not likely to be the case. A curriculum head at one of the sixth form colleges argued that the optimal college portfolio, for which the tariff works best, is at around 300,000 units. One traditional FE college considered that the optimal size of a college of that type was around one million units; this was broadly corroborated by another principal at a similar type of college. The capacity of colleges to converge to the optimal size of provider cannot be presumed.

Fourth, **for some colleges convergence was upward.** These colleges (there were two in our case studies) had complained that convergence was not coming fast enough (see Russell, 1997). There did seem to be agreement that convergence should be implemented quickly, so that debate could proceed on the appropriate allocation mechanism without contention about the historical disadvantages of particular colleges. It is an argument that presumes the FEFC's definition of convergence would resolve debate over differences; the lessons from convergence in Wales and in schools in the early 1990s were instructive here.

Finally, there was the argument that **there are no special cases**. All colleges have different cost and revenue functions, and the formula would never be able to take account of all the differences. Colleges with rural catchments may have fewer students, but colleges with inner-city catchments may have more social problems. This 'no special cases' argument was not generally accepted: the principal at one large FE college considered that there should be a weighting for small colleges and metropolitan colleges. Yet there is merit in accelerating to convergence. It might then be regarded as a simple rule that is not an end in itself but a 'level playing field' over which discretionary initiatives such as Widening Participation can be overlaid; in turn, these initiatives will signal more clearly the mission, purpose and values of the FE sector.

We propose categorising the effects of convergence into three:

- adjustments that are likely to have no effect on outcomes in the long run (such as the flexibilisation of staffing terms)
- those that may perhaps have created issues for the future (such as fatigue factors for staff)
- those that have provoked significant and substantive problems (such as future recruitment).

Ultimately, the effect of convergence on academic outcomes will depend on the extent to which the elements of the restructuring described fall into the last of these three categories.

Tariff effects

Hypothesis 3 The weightings of the funding tariff have led to greater diversity of provision within colleges.

Preliminary evidence and context

The FEFC funding methodology allocates resources to colleges on the basis of a tariff, detailing the on-programme units accruable for particular courses (in addition, there are on-entry and on-completion units). Colleges may provide a range of courses that are named on the tariff and apply for the appropriate amount of funding; colleges essentially select which courses to provide, given their costs and missions. This self-selection should permit specialist agricultural colleges, for example, to co-exist with 16–19 GCE A-level provider sixth form colleges, but crucially only if the weightings in the tariff are appropriate.

The funding tariff was expected to be neutral (mode free) in its effect on provision, subject and level of study, and the Tariff Advisory Committee is required to advise the council on how to make it so. However, there is a widespread perception that the tariff is not neutral. (For a single college exposition, see Dean and Gray, 1998.)

Colleges may be able to 'tariff farm', i.e. increase provision in areas where, given their college structure and cost function, the tariff is relatively resource rich. Also, colleges may adjust their pattern of provision to accumulate extra units. These practices are an attempt at tariff maximisation. We investigate this non-neutrality further by testing a hypothesis that the weightings of the tariff have led to greater diversity of provision within colleges. We adopt a wide definition of diversity. Diversity of provision for students may extend across different modes of delivery, subjects, curriculum areas, qualification levels or pedagogies. Diversity can also refer to the types of courses taken by individual students. As well, diversity might be reflected in the changing portfolio of courses each year, in response to the labour market. We exclude questions of franchising here, as this has been considered elsewhere in our report.

Diversity of provision may be regarded as a positive development for several reasons:

- As Foskett and Hesketh (1997, 308) observe, 'the centrality of choice in driving FE provision in England and Wales is a key element of government policy'; the DfEE (1998, 27) comments that 'individuals are best placed to choose how and what to study'.
- In an economy in which specialist skills are prized, a range of opportunities may allow individuals to equip themselves appropriately. This is particularly important if those participating in FE typically have constrained choices.
- Professionals in the sector regard their provision as highly responsive to changing demands within the economy, and it would be expected for this responsiveness to be reflected in the range of provision.
- As well, limits on choice are often made as a criticism of school sixth forms in comparison to the FE sector.

These general issues provide a context against which we investigate choice within individual colleges and whether changes in provision have been prompted by the weightings of the tariff. To test our hypothesis we draw on national data, and on interviews and evidence from eight case study colleges. We first use national data to describe how provision has changed over recent years and whether or not this reflects more or less diversity. In the first section of our evidence from the colleges, we explicate how tariff weightings may affect provision; the second section then investigates whether or not colleges have been able to tariff farm.

Findings from the aggregate data

From national evidence, Bourn (1997a, 2) finds that the 'funding methodology has had a positive effect on increasing flexibility in teaching and learning methods.' National data (Tables 3 and 4) illustrates the areas of most change. Growth in subject provision has been skewed toward sciences and health and community care, with much lower growth in construction, engineering, agriculture and humanities. These disparities in growth rates may be suggestive of an effect of the tariff rather than change in economic need for skills. It may be hard to argue that the economy has changed so much between 1993–94 and 1996–97, although it may be that colleges are now catering for previously unmet needs. One explanation may be that the tariff is more generous to areas where student numbers can be increased at low marginal cost: absorbing extra students in a classroom may be easier than in a laboratory or workshop, for instance.

Table 3 Percentage growth in student numbers (1993–94 to 1996–97)

Subject	% growth
Sciences	79
Agriculture	25
Construction	10
Engineering	30
Business	39
Hotel and catering	50
Health and community care	145
Art and design	40
Humanities	26
Basic education	35

Table 4 Percentage growth in council funding units (1993–94 to 1996–97)

	% growth
On-entry	26
On-programme	39
Fee remission (16–18)	9
Fee remission (other)	112
Additional support	62
Achievement	27

Table 4 also shows that the main growth in claimed funding units has been on fee remission (other than 16–19), which suggests large scale change in the client groups of FE (or perhaps more use of marketing devices). Over the period 1993–97, more FE provision was devoted to additional support and to fee remission for those other than 16 to 19-year-olds.

On the evidence in Table 4, the funding formula has been relatively less favourable to 16–19-year-old provision, which may also be affected by:

- the contracting post-16 labour market
- competition with traditional post-16 providers in school sixth forms
- changes in LEA funding policies for discretionary fees and awards (Leney et al, 1998).

Although greater increases in the volume of provision to older cohorts does not automatically mean provision is more diverse, there is evidence here that the sector's growth areas have at least maintained diversity .

However, from these tables, alone we cannot be certain that any of the changes are attributable to tariff weightings or to the cohort of enrolled students. To examine the relationship further, we outline possible opportunities for colleges to farm the tariff to their own advantage, then juxtapose evidence from our eight case study colleges.

Findings from the college data

Tariff farming opportunities

Tariff farming can happen in various ways. We distinguish three sets. The first type of activity is to exploit the cost weightings of the tariff by shifting provision to areas in which the college is relatively resource rich (this is presumed to be the most likely to stimulate diversity in provision). Second, there are ways to use funding units as the operand for management planning and resource allocation, thus optimising the funding units for a given level of activity. Three practices may result:

- a reduction of guided learning hours (GLH) per 'individually listed' courses to the minimum required per course
- avoidance of exceeding the upper limit of GLH for load-banded courses
- a push of the GLH above a threshold and into a higher annual on-programme unit credit level.

Each of these practices will maximise funding units by ensuring a direct match between the hours for which the programme is funded and the actual hours the colleges devotes. The third type of activity is to optimise the amount of effort or resource devoted to individual students. This may be achieved by encouraging students to adopt a full-time study programme, because full programmes of, for example, three A-levels earn more than three individuals doing A-levels.

Each of these three sets predict possible behaviours in relation to the funding formula. However, we recognise that there are many constraints, strategies and preferences that may cause actual behaviour to differ from predicted. Below, we investigate the extent to which colleges have been able or willing to apply these opportunities.

Cost weightings

A key issue for this inquiry is whether or not the tariff has led to greater diversity of provision. This would happen if the funding formula had encouraged changes in the level of provision, the curriculum mix, the mode of delivery and pedagogy.

On the level of provision, one of the more common changes was the rise in basic skills courses. There were some concerns that the basic skills course weighting on the tariff would lead to many more courses, simply because it is easier to categorise courses as such. However, some colleges have seen this as a positive step, dovetailing with provision for students with disabilities or learning difficulties, and bringing such marginalised groups into the mainstream of the college's work. By contrast, courses that have not developed and may decline in the long term are those with high fixed costs: engineering, construction and sciences. (This was reported to the Education and Employment Committee, 1998, xix.) It was felt that once the equipment for these courses has reached obsolescence. there will be inadequate funding for replacements. At the larger, inner-city FE colleges it was recognised that the tariff was relatively rich for IT courses (an opinion echoed at most colleges), but vocational programmes were not funded enough in terms of advice and guidance. At one of the general FE colleges, the main increases had been in NVQs and prevocational courses. At one sixth form college, a wider range of AS-level courses was evident. Typically, then, changes in the curriculum and a reduction in the levels of the courses proceeded together.

Regarding the curriculum mix, some changes were made. At the sixth form colleges, changes in the curriculum included:

- an increase in the volume of adult courses
- a rise in the number of GNVQs
- the accreditation of the general education programme and tutorial guidance programme.

There has also been growth in particular subject areas. These changes were limited at sixth form colleges, however, where there was pressure from students, parents and staff to keep the core group of students and resist introducing new client groups. Considering this issue more generally, Leney et al (1998, 7) find that the funding method has focused attention on courses that meet the National Education and Training Targets. They conclude that the funding mechanism has affected 'different groups of students in different ways'; adult learners benefit from 'tailor-made programmes and more careful initial advice and guidance'. As do we, Leney et al find that curriculum development was not encouraged by the funding methodology and perhaps was seen as 'opportunistic marketing.'

Diversity of provision may be reflected in changes to the mode of delivery of courses. First, although greater programme modularisation might be expected, so that more options were available for students and timetabling could be more flexible, this was hard to implement. At one of the larger FE colleges, this had not proved possible principally because of insufficient overlap between sections of the curriculum. Second, provision has become more flexible. At one of the smaller sixth form colleges, for example, there had been changes to programme delivery through outcentres, flexible timetabling and Saturday courses. At other colleges, where community provision was stronger, summer school provision had increased.

There have been some shifts in the pedagogy to resource-based learning and learning facilitators, along with a substitution to using students as mentors in tutorials. Resource-based learning, put forward as a cost-effective form of provision, was attempted at both vocational and academic colleges, but found to be technically complex (Leney et al, 1998, 30). One curriculum manager considered that extra physical resources were not 'a substitute for teaching staff, but a complement'.

Use of funding units as the college operand

As the funding formula allocates resources on the basis of the funding unit value of the tariff, colleges might be expected to equate their provision directly against the terms of the tariff. The colleges that can perform this equation most accurately will accrue more funding units and, assuming an accurate bid, obtain more funds. Although there is evidence of this equation, there are also several reasons why colleges did not use the funding units in this way. Leney et al (1998, 12) also find that colleges are not driven by their funding units.

The first reason for not focussing solely on the funding units is 'mission-related'. At one general FE college, the college managers were mindful of the funding implications of their provision, but 'not completely cynical' in cutting programmes as per their funding units' accrual. At another, one programme area curriculum director argued that being driven by funding units would generate an automatic 'conflict with the learning goals'. There were general avowals that 'the funding formula does not dictate curriculum and learning' and some noted the external constraints placed on learning by professional bodies or awarding bodies. At one of the inner-city FE colleges, some courses were also constrained because of the impact on the participants' social security status.

However, the principal at another general FE college was firm that these equations forced change on colleges, and that it was neglectful not to tailor the hours of the courses in this way. At one of the sixth form colleges, the recognition was blunt: 'the main driver is the 450 hours rule.' One approach, adopted at both these two colleges, was to follow up all individual students who are at 440 guided learning hours. At the other sixth form college, there is some evidence of this; the funding tariff was described as having a 'reinforcing impact.' Notwithstanding the arguments about mission, across all the colleges changes to programme delivery have included less contact time per module (Bourn, 1997b, 32).

A second and related reason for not applying a funding units regime was management suasion. One of the sixth form colleges argued that 'there is little attempt to calculate using the funding units per student as the working operand; staff do not think in these terms and there is concern that they should not do so'. At a large city college, a particular form of 'resourced hours' was used as the internal unit of resource allocation but this did not relate directly to funding units. However, one department head from a large FE college noted that, although the principal was 'not obsessed with units', it was made evident that money would follow students.

A third reason for not applying funding units was that they were not always understood. Dean and Gray (1998) also found this, and Leney et al (1998, 14) describe awareness of the funding method as 'patchy'. Bourn (1997a, 26) is more expansively critical: 'financial information was often incomplete and colleges tended to be poor at considering the resource implications of individual courses.' Colleges acknowledged that staff competence at manipulating the tariff is low. As well, at some of the larger colleges, it seemed unlikely that the aggregate effects of tariff farming could be straightforwardly assimilated by any one individual. Yet, given the managerial suasion against tariff farming, such ignorance is appropriate: effort in gathering the information to play the tariff may be high and not worthwhile.

A fourth reason was that calculation of total college funding units involved a 'complex algorithm', particularly with the abandonment of the cash-unlimited demand-led element of funding. The number of funding units is now a target, rather than a variable to be maximised. This has changed practice in some colleges in subtle ways. For example, one of the sixth form colleges had stressed retention of students as a more cost-effective way of raising performance concomitant with the funding tariff. However, since the ending of the demand-led element, the college is now in a position of delivering substantially more units than it is funded for. This now places the college management in the new position of being, in funding units terms, 'ambivalent' about improvement in retention. Thus, even though retention may signal better education, it places further burdens on colleges resources. A similar tension was recognised at the other sixth form college. Another college recognised that its funding units total had been quite volatile over the last three years.

Related to this previous reason, a fifth reason for not using the funding units as the operating variable to be maximised was that the funding formula had frequently changed in detail. This made precise planning difficult. According to the curriculum manager at one of the sixth form colleges, although the FEFC have advised that colleges should plan for no increase in units in the following year, targeting using the FEFC algorithm is problematic for two reasons. First, other income sources may impact on the funding unit strategy and second, the FEFC's advice may itself be subject to revision. These problems of calibrating the algorithm to get the desired planning results were felt particularly by one of the large FE colleges.

Finally, and perhaps as a result of the above factors, funding units do not correspond to the internal resource transfer around the college. One option is for departments to compete against each other for funding unit allocations. This did not happen at some colleges because the admission of students was centralised and the competitive nexus could not easily be generated. In some colleges, departments only receive their capitation budget or top-sliced income. In contrast, at one of the FE colleges, department heads were encouraged to tariff farm and should be aware of ways to maximise the formula, within the constraints noted above. At another, because of the size of the college, many of the decisions are made by the Heads of Department, although mediation of the tariff then occurs at the central college level.

The above is a substantial list of constraints on the manipulation of the tariff, revealing many ways in which behaviour and outcomes may differ from those that would result from a literal interpretation of the formula. The intricacy of the system militates against strategic, college-level farming. As further evidence of this, many of the colleges noted that they were likely to miss their funding units target, typically within plus or minus 5%. Even if a college can find an opportunity to tariff farm, exploiting that opportunity may neither always be possible nor, on closer inspection, advantageous. Hence diversity of provision may not be much affected.

Tariff farming at the individual level

While colleges may not operate by optimising funding units directly, an indirect and simpler version of tariff farming would be to optimise at the level of the student. As our examples show, there is some scope to do this.

At one of the FE colleges, staff were expected to ensure that students were on a full programme. At another, the mode of delivery better accommodates full bundles of A-level provision (e.g. in IT courses). Elsewhere, courses have been made opt-out rather than opt-in, since this improves the student numbers per course. At one of the sixth form colleges, bundles of qualifications were pressed on students through the retention policy; students only attempting two A-levels were being discouraged, partly because the quality of the education experience is felt to be greater for full-time students, but partly because of the tariff incentives. At two of the colleges a broad portfolio of open access courses raised the likelihood that students would undertake the optimal number of guided learning hours although, in some cases, this portfolio led students to take too many courses in funding unit terms.

However, again there are constraints to this behaviour. First, there is not an option to add on some courses, such as NVQs, because these are often too onerous to allow additions to the main learning programme (see also Dean and Gray, 1998). Second, tutors may have been willing to recommend more courses but timetable constraints may occur. Third, some students were not interested: one curriculum manager noted that students changed their options sufficiently frequently to render difficult any exploitation of the most resource-rich elements of the tariff. These constraints were found to differ by subject, being less binding on basic skills courses. Some of these tariff-maximising strategies are regarded more critically than others. One college claimed to know of deliberate changes to the teaching programme elsewhere that had increased funding significantly. Students could be placed on a fourth A-level, funded at the full rate, yet with fewer resources devoted to it than the standard complement of provision. The case study college regarded such practices as deleterious to student performance.

However, there is some evidence that the tariff may lead to greater diversity for individual students. At one of the general FE colleges, new day-release and shorter 30-hour programmes meant that the students were now different. At another, tougher policies on enrolling A-level students meant that a greater proportion of students were in receipt of fee remission. At one of the sixth form colleges, imaginative programming and mixing of the curriculum had increased the numbers of A-levels taken by students intending to study at university. At the other sixth form college, despite intentions to focus on 16–19 provision, the adult student population was planned to double over the next two years (1998–2000). The Welsh case study college had experienced rapid growth in both 16 to 19-year-old students and adult learners. At the specialist college there had been significant expansion into 16–19 provision within a stable total of enrolment; part-time numbers fluctuated significantly.

Consensus on the accuracy of the tariff

In the earlier sections, we looked in detail at tariff farming, via manipulations of cost weighting, funding units and student profile. Examining these together, a plausible inference is that the funding tariff has appropriately assessed the resource requirements of the colleges. Broadly, our interviewees found the tariff to be 'about right' and to have 'protected diversity' rather than encouraged it. There was a widespread appreciation that it is not possible to make the tariff perfect, but that it could be made simpler, a conclusion also made by the Committee on Education and Employment (1998, xxxi). Given this approbation, many of the colleges felt there were particular instances where the tariff could be improved.

At the FE colleges it was felt that the tariff penalised heavily for non-retention, disadvantaging colleges with a high number of unemployed students who are training but also seeking work. One college felt that the definitions of the tariff were not appropriate for part-time courses and these had been poorly manoeuvred into the tariff. For some part-time courses such tariffication had improved the courses (a point made by one sixth form college). Elsewhere – and typically at the colleges with a greater spread of academic, vocational and community provision – enforced accreditation of such courses had not improved the course and had, in fact, reduced demand by those groups, such as the over 50s, who did not want to have to undertake accredited courses. One sixth form college attributed its falling enrolments in Modern Languages to the lack of incentive for such courses in the tariff.

The more substantive criticism, made by the principal of one of the sixth form colleges, was that 'the tariff does not reflect real costs'. Some courses can turn a profit, but A-levels cannot. One FE college only partly agreed that the FEFC's assessment of load banding and the actual demands of the course are the same, although college management had sufficient autonomy to deploy funds strategically. At another large college it was argued that the FEFC had 'no understanding of adults' in terms of their educational needs; they require a form of education that is less structured and less formal than the tariff has created. This discrepancy may become more important as participation by adults grows. Similarly, at a large community provider, it was thought that the tariffication of courses, particularly in programme area 10 or for the over 50s, meant that the courses had to be vocational and accredited. It was argued that this represented a misunderstanding of the motives for study by these groups.

It was acknowledged that pressures to tariff farm are increasing as the funding is further constrained. However, the FEFC is also catching up with funding discrepancies, often by narrowing the funded curriculum. Given that much of the diversity is in the mode of provision rather than the subject being provided for, this narrowing of the curriculum may not greatly impact on diversity within the sector, although one principal did disagree with this conclusion.

Finally, tariff farming is about revenue raising for colleges. Its prevalence will, therefore, depend on whether or not it is the most lucrative strategy for generating revenues. The strategic plans of colleges show consistent evidence that better financial management of the college's assets was crucial. Better utilisation of physical resources appears to be a more lucrative way to raise revenues, including more day-care centres, greater catering service provision and, to facilitate provision, longer open hours and more intensive use of facilities. As well as movement to full-cost recovery on courses and increases in HE-funded provision, more revenues from project funding were commonly being sought. The specialist college already had a range of income from other sources, including college production. The strategic plan of the FE college in Wales was explicit about improved cost management.These managerial steps, rather than the tariff, are likely to raise most revenue in the future.

Conclusions

The evidence about tariff weightings appears to be that manipulations of the tariff were rather more talked about than actually done. Leney et al (1998, 13) found that 'colleges spent a great deal of time and effort marrying their programme planning and target setting to the demands and constraints of the funding methodology'. The House of Commons Committee (1998, xvi) also noted over-preoccupation with tariff farming. Our evidence suggests this is less the case than is typically claimed: flexibility within the system should not be confused with negative activities such as tariff farming. Although it may be possible to identify potentially resource rich areas of the tariff, it should not be presumed that colleges change their provision to exploit such richness. Moreover, continuously searching for resource/cost differentials is not in itself cost effective.

Hence, for many reasons – educational, managerial and operational – it was possible in only a limited way to farm the tariff. Several conclusions follow from this:

- The effects on teaching staff and management of having to 'play' the funding formula appear to be limited.
- The tariff weightings are not likely to have changed the learning experience in FE; the mode of delivery has changed rather what is delivered.
- Changes in provision have in the main been stimulated by differing rates of growth rather than redistribution of FE resources; to the extent that growth has now been checked (at least in the short term), restructuring may involve abandoning some programmes rather than simply having less provision.
- The practice does not appear to be invidious between colleges, favouring some colleges over others. The form of response to the weightings of the tariff may differ across colleges, but any favouritism in the tariff is unlikely to be substantial.

Our conclusion is that with some changes in delivery and the curriculum, that are then reflected in different student groups, the reasonable accuracy of the tariff has allowed rather than encouraged diversity. Given the importance of diversity to the FE sector, this appears to have been a positive outcome.

Regional variations

Hypothesis 4 The variations in funding and performance are greater within regions than they are between regions.

Preliminary evidence and context

Regional influences are being factored into an increasing number of policy initiatives; in particular, regional funding has been identified as an issue for consideration by the funding methodology review group for further education. However, the costs and benefits of regional funding need to be clarified. As a step toward that, we investigate whether or not the variations in funding and performance within regions are greater than those between regions.

Our research draws on national data and on interviews with staff at eight colleges in the sector. These colleges reflect a range of provider types (two sixth form colleges, two specialist colleges and three general FE colleges); they are located in the North West, London, East Anglia, the South West and the West Midlands. In addition, staff at a Welsh FE college were interviewed. Before presenting our findings from these two data sources, we outline the key issues for regional funding in FE.

- Regional policies may be needed to accommodate the fact that colleges are typically competing for students with other colleges in the same region. As a result, a policy of national convergence of Average Levels of Funding, for example, may not necessarily be appropriate.
- If labour markets differ between regions, tailored portfolios of vocational programmes could be funded at appropriate levels to reflect this.
- Colleges in particular regions may experience similar patterns of demand for courses, and this could be accounted for in a regional tariff.
- Colleges within a region may have similar organisational characteristics: inner-city colleges may have higher costs; some regions may have particular staffing problems.

Localities of colleges may also have experienced the same funding regime prior to incorporation and this may affect the long-run costs of upkeep of physical resources.

If regional differences such as these do exist, therefore, there may be reasonable grounds for proposing a funding method that is sensitive to such differences. If it is only through closer links between the funding body and the colleges that these links can be identified, then regional agencies may be more appropriate. However, if there is as much difference within regions as between them, then there may be little to gain, either in terms of policy or in terms of devolving power and resource allocation to another tier. Creating a funding formula that is sensitive to regional difference may also be difficult. Hence our investigation is of immediate importance.

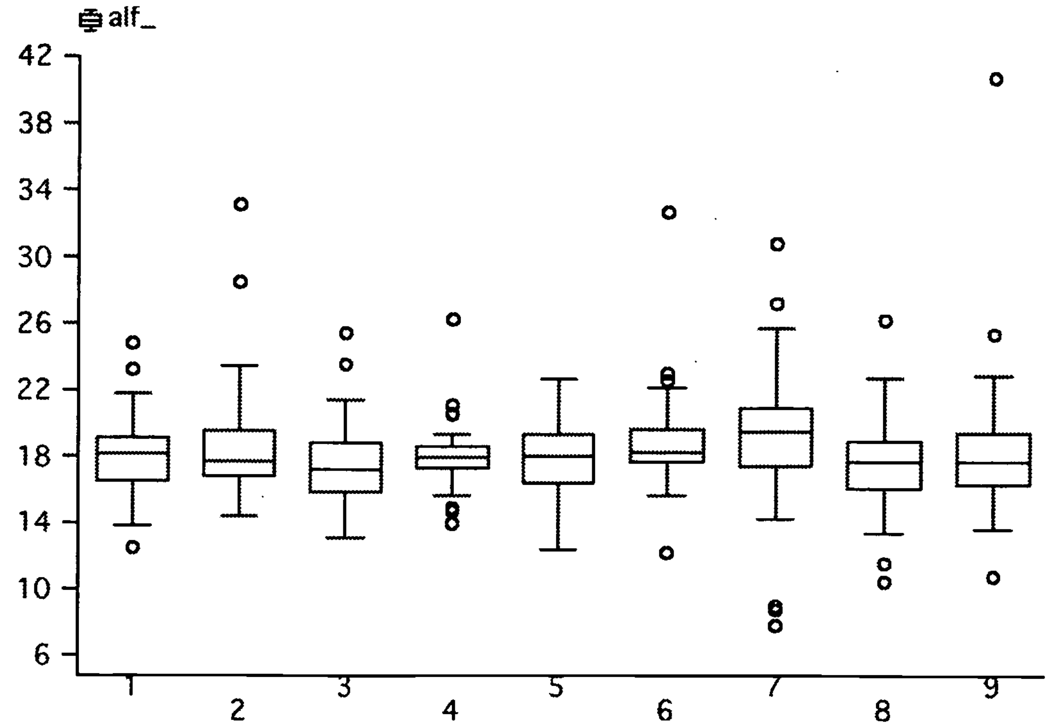
Findings from the aggregate data

Sectoral data indicate some regional differences in FE. Spours (1995, 7-8) finds significant regional variations and argues that these are driven by increased participation rates and the spatial distribution of Youth Training and Training Credits. Bourn (1997a, 64) identifies Yorkshire and Humberside as one region that 'is only slightly below average in terms of funding levels and growth, but currently it has the highest proportion of colleges in serious financial difficulty'.

Our approach is to use national performance indicator data, split across regions. Figures 1–5 are 'box and whisker' plots to describe the spread of summary values across colleges by region. The box captures the inter-quartile range, with a line for the median value; the whisker gives the next adjacent values to the 25th and 75th percentile values. These representations thus show information about the middle range of colleges (both in terms of the median college and the middle 50%), the extreme colleges within a region (those on or beyond the whiskers) and the relationship between the middle range and the extremes (the length of the whisker). We use the nine FEFC regions: South East; Greater London; East; Yorkshire and Humberside; North West; East Midlands; North; West Midlands; and South West.

Figure 1 presents the regional spread of the Average Level of Funding (1995–96). Yorkshire and Humberside (4) and then the East Midlands (6) appear to have the most converged fit of ALF levels, with the most compressed boxes and whiskers; the North (7) appears to have the greatest diversity, as well as the highest median ALF. The median ALF values for eight regions appear to be very similar, with no obvious difference between the middle colleges of one region compared to those of another.

Figure 1 Spread of the Average Level of Funding by region (1995–96)



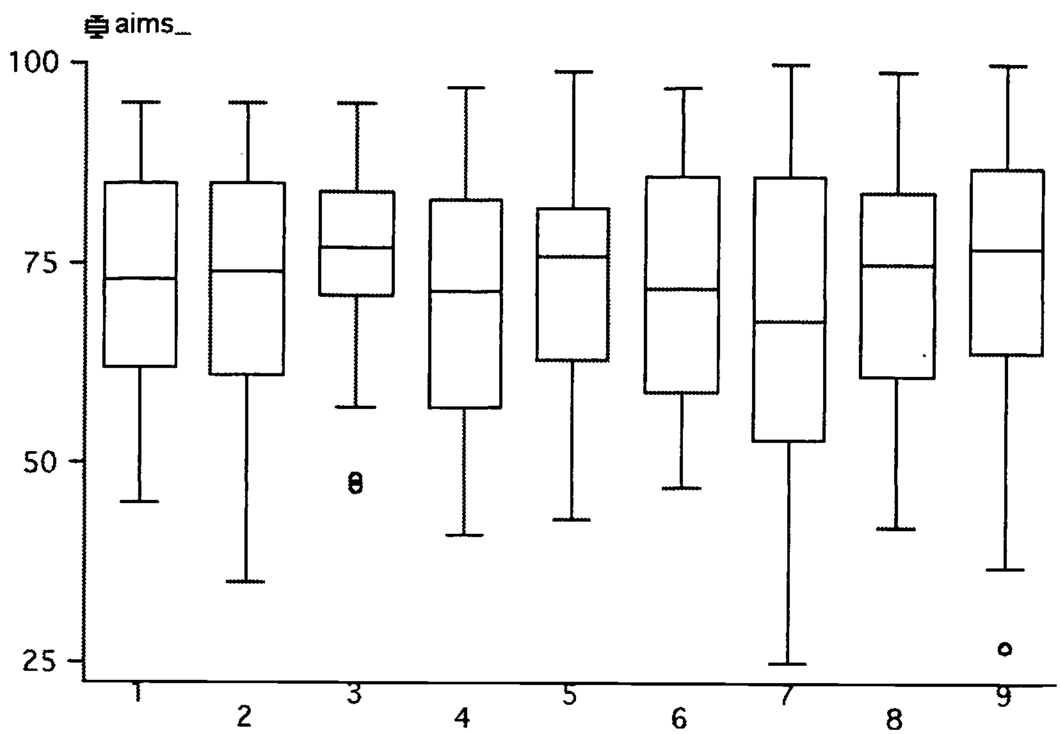
Key to x-axis

The following figures give information on colleges broken down by region. The regions are coded as:

South East =	1
Greater London =	2
Eastern region =	3
Yorkshire and Humberside =	4
North West =	5
East Midlands =	6
Northern region =	7
West Midlands =	8
South West =	9

Figure 2 gives the regional spread of aims achieved per college in 1995–96. Colleges in the Northern region (7) show the greatest spread and the lowest median line. The Eastern region (3) has levels of aims achieved that are the closest together of all regions; this might suggest this to be the most homogeneous within regions.

Figure 2 Spread of aims achieved by region in 1995-6



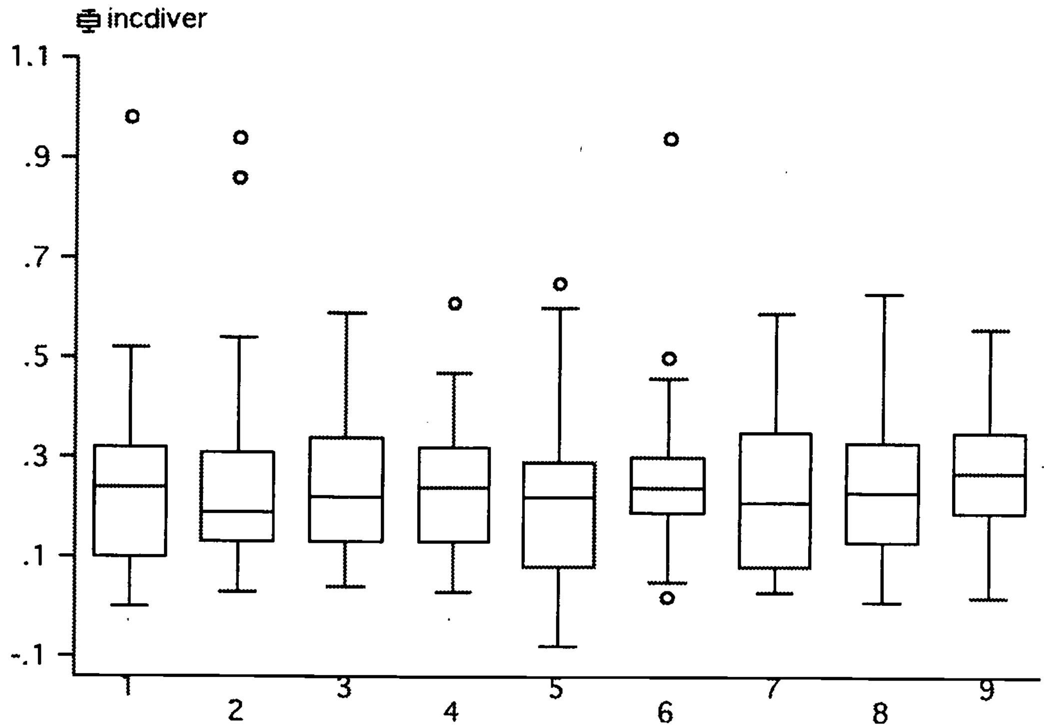
Key to x-axis

The following figures give information on colleges broken down by region. The regions are coded as:

South East =	1
Greater London =	2
Eastern region =	3
Yorkshire and Humberside =	4
North West =	5
East Midlands =	6
Northern region =	7
West Midlands =	8
South West =	9

Figure 3 gives the income diversity proportions per college. The North West (5) has the broadest diversity of income ratios, whereas the East Midlands (6) has the narrowest.

Figure 3 Spread of diversity of income by region in 1995–96



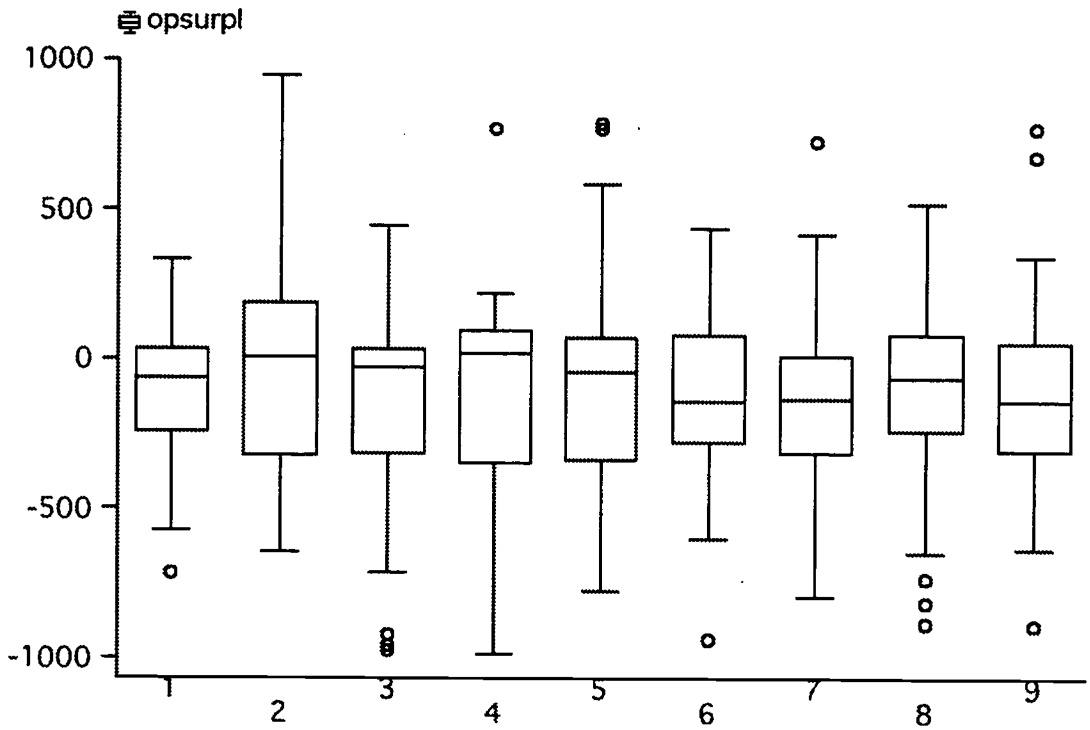
Key to x-axis

The following figures give information on colleges broken down by region. The regions are coded as:

South East =	1
Greater London =	2
Eastern region =	3
Yorkshire and Humberside =	4
North West =	5
East Midlands =	6
Northern region =	7
West Midlands =	8
South West =	9

Figure 4 shows the net operating surpluses of the colleges by region (1995–96). Greater London (2) has the largest spread (longest whiskers); it and Yorkshire and Humberside (4) have much broader ranges than the other regions. The middle 50% (the box) of all colleges in Greater London (2) are spread more widely than the middle 50% in the South East (1).

Figure 4 Spread of operating surpluses by region in 1995–96



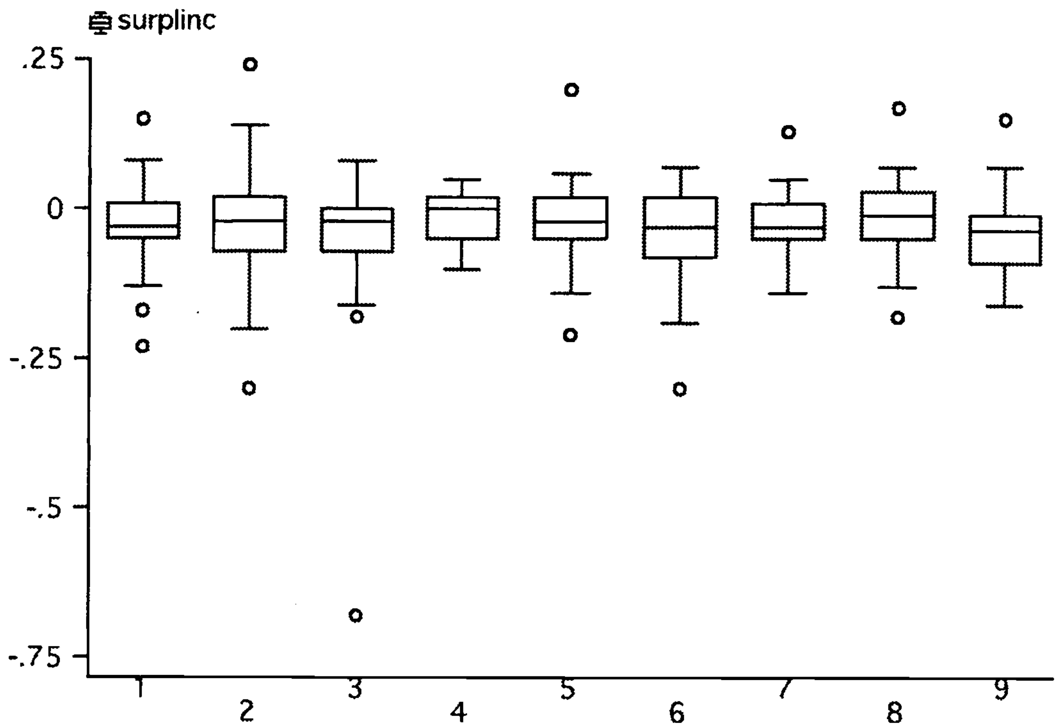
Key to x-axis

The following figures give information on colleges broken down by region. The regions are coded as:

South East =	1
Greater London =	2
Eastern region =	3
Yorkshire and Humberside =	4
North West =	5
East Midlands =	6
Northern region =	7
West Midlands =	8
South West =	9

Figure 5 gives the proportions of surplus divided by income. Greater London (2) has the broadest spread with colleges in the South West (9) experiencing the largest percentage deficits.

Figure 5 Spread of operating surplus/income by region in 1995–96



Key to x-axis

The following figures give information on colleges broken down by region. The regions are coded as:

South East =	1
Greater London =	2
Eastern region =	3
Yorkshire and Humberside =	4
North West =	5
East Midlands =	6
Northern region =	7
West Midlands =	8
South West =	9

In each of these Figures 1-5, there is as much variation between colleges within a region as there is variation across the regions: the boxes are generally similar in size and the whiskers are similar in length.

The above analysis has largely looked at the financial indicators for colleges. An alternative approach would be to look at examination performance or perhaps process indicators, such as the proportions of teaching staff. Different stratifications to the regions may also be tried. However, in summary, there is evidence of diversity between the regions, but no strict ordering of the regions can be inferred. Different regions appear to be performing best, depending on which of the performance measures shown here is used. Using the national data, systematic regional difference does not appear to be evident. This suggests that the identification of regions and norms for regional funding may be problematic.

Notwithstanding the above, the House of Commons Education and Employment Committee advocates a greater regional focus to FE. It notes that there is a surplus of agencies or planning bodies in FE and that the FEFC's regional committees should take a greater role in planning provision (1997–98, xliv). They conclude for 'the FEFC's regional committees to facilitate the establishment in their areas of smaller, sub-regional partnerships, bringing together relevant organisations, which will help to identify local needs more easily' (xlv). However, these proposals explicitly do not extend to direct affiliation between the FEFC regional committees and the Regional Development Agencies. As well, this conclusion does not suggest a regional funding formula. Our inquiries at the colleges elucidates whether this mandate accords with the views of professionals within the sector.

Findings from the colleges

The issue of regionalisation of FE was also investigated at eight case study colleges. Our primary interest here was to see how professionals conceived of regional policy, and what they considered were the advantages and disadvantages of regional funding. Their evidence suggests that region is not a significant point of difference within the FE sector, although there may be scope to amalgamate policy at a regional level.

Little evidence was found that a college management's regional strategy differed in approach across the regions. Within each region, there was modest evidence of collaboration between colleges (and with schools); most colleges were mindful of the capacity and capability of neighbouring providers. One of the inner-city FE colleges had a unitisation project with a neighbouring college; a sixth form college in a different region collaborated with schools on assignments and supervisory work. One sixth form college gave evidence of a particular history of regional co-operation in its locality. This uniformity of practice was reflected in the relationship colleges had with the FEFC. One principal remarked that FEFC's regional role was 'pretty meaningless'. Colleges that benchmarked performance admitted to comparing themselves frequently with extra-regional colleges. Despite the absence of an obvious regional effect, some colleges did affirm the need for a regional weighting. Others saw such regional differences as 'rough justice'. One college principal thought that some regions were more easily identifiable than others and pigeonholing all colleges into a region would therefore be difficult.

There were questions about the optimal number of colleges that could be managed within a regional 'cell'. Comparisons with FE funding in Wales, where FEFC(W) was on much closer terms with staff at the colleges, were insightful. With only 29 colleges, FEFC(W) was better able to monitor and respond to colleges' circumstances. (Reference was also made to FE funding in Scotland.) The gains from having smaller cells were threefold:

- gains from partnerships as colleges built strategic alliances
- economic development gains, with smaller regions having a better understanding of the needs of the local economy
- communication gains, as it was possible to have a unified forum through which to disseminate and assimilate information.

Only the last of these specifically relates to the funding method.

It was generally thought that if there was to be regional co-ordination, it should not be organised as FE co-ordination. Two principals considered that what should be regionalised was higher and tertiary education as a whole. It appears incongruous to have regional FE funding while at the same time having national HE funding and different regional bodies for TECs, schools and other government agencies. Such an agglomeration of agencies would be complex and restrict the leverage role of FE bodies to the margin and to being information providers. Regionalism would simply be added complexity.

There were differences in views over what should be organised regionally. As well our concerns over regional funding, regionalism may be considered as an organisational issue, grouping colleges and developing a stronger regional role for the FEFC. Regionalism might also become a wider phenomenon, incorporating political devolution to the regional assemblies. Advocates for each of these positions were to be found in our case study interviews.

Conclusions

One might conclude from this discussion that regionalism is a problematic notion. On one side, there is only limited evidence either that FE can be divided into regions or that the distinctiveness of FE is well captured by a regional division. Yet, from the other side, there is a clear expression of need for a bold regionalism, more encompassing than that envisaged by the House of Commons Education and Employment Committee. Without a regionalism of tertiary education, there may be a danger that enclaves of FE in regions will become as divided as when colleges were under local education authority control. Yet the benefits of regionalism arise from 'knowing the market', allowing better planning, management and fine-tuning of funding to account for particular circumstances. These benefits may be lost, and extra complexity piled on, if regional policy on FE must accommodate the positions of TECs, schools and HEIs.

Finally, our investigations into the funding of FE on franchising, on tariff farming and on convergence have found that problems have arisen in accommodating the diversity of the sector into a single funding formula. Perhaps regional funding could ameliorate the side-effects from these. It might be argued that a more knowledgeable FEFC would have identified the less scrupulous franchising activities earlier. However, colleges were prepared to concede that the tariff was 'broadly right', suggesting few gains from regionalism. Regional convergence may have been smoother and some regions may have rejected convergence altogether. Considering the aggregate picture, the scope for improvement with regional FE funding councils would also depend on whether or not they had control over the amount of resource available (which seems unlikely); otherwise, they would only be able to redistribute resources, shifting priorities rather than determining them.

Conclusions

This research has focused on the funding method for further education. From a theoretical study of the stimuli built into the New Funding Methodology, four topics of interest were selected for further investigation. To clarify the arguments, these topics were cast as a series of hypotheses that could then be tested using both national, aggregate data and documentary and interview evidence from eight case study colleges.

Franchising behaviour

The hypothesis was that colleges were subsidising core provision from their franchising arrangements. Four categories of franchising college were identified:

- colleges that did no franchising
- strategic franchisers
- opportunistic franchisers
- large-scale franchise colleges.

The evidence suggests that franchising could be only a marginal source of cross-subsidy for many colleges, but this is largely because colleges have demurred at large-scale changes in provision. Nevertheless, the experience of franchising has illustrated how, in a diverse market such as FE, the deliberately non-prescriptive role of the FEFC may generate unintended outcomes. A nucleus of franchising colleges has emerged, along with anxieties about motives (including profit-seeking). Such anxieties and their concern about quality (concern which has been hard to verify on the limited data available) has been the adverse outcome from this behaviour.

Experiences of colleges' convergence

The hypothesis was that convergence has worsened the performance of students in FE. Rather surprisingly, views on convergence were not overly critical, and its consequences were also seen to be less adverse than might be expected. The main responses to convergence have been to change the terms and conditions of the teaching staff and to diminish enrichment and pastoral care; mergers have also been prompted. These organisational responses of colleges have, so far, been effective in insulating the quality of education from changes in resource levels. It remains to be seen for how long this can continue. Moreover, data on process indicators may offer a more accurate and earlier diagnosis of the adverse effects of funding convergence. In particular, investigation of teachers' positions should be undertaken.

Tariff farming

The hypothesis here was that tariff farming may have led to greater diversity of provision within colleges. There is some evidence that this has been the case, although large-scale manipulations of the tariff appear to be speculated on rather more than they are put into practice. Colleges can farm for units either because of differences in the cost weightings, because of better use of the funding unit formula for internal resource allocation, or by reconfiguring individual students' learning programmes. Yet each of these farming activities requires intricate knowledge of the formula and flexibility of provision; in practice, organisations cannot respond sufficiently flexibly. As a result, diversity of provision has at least been protected by the tariff, even if it has not been promoted. Considered within the entirety of colleges' operational responses to the funding method, tariff farming is not substantial.

Regional differentiation

The hypothesis was that there is greater differentiation within regions than between them. If proved, under a regional system each region would have to accommodate as much heterogeneity as is currently being accommodated under the national system. Notwithstanding evidence that there is significant diversity within regions, many college professionals did think that one way to improve the funding methodology would be to make it more sensitive to the needs of the region. Combining FE funding with other education funds was also proposed. The evidence here is not definitive and the regional funding of FE needs further exploration.

General

This series of investigations has come out with reasonably positive conclusions. Colleges have been found to respond to the stimuli of the New Funding Methodology, yet only infrequently in ways which might be considered as 'excessive' or 'volatile'. Many colleges have recognised and taken advantage of the greater freedoms to respond to the key policy drivers identified in our Introduction: with appropriate steer of the funding formulae, FE colleges can continue to play a vital role in enhancing the quality of the nation's human capital and widening participation and access. Nevertheless, regular reviews of the funding arrangements are needed and should acknowledge the heterogeneity of the sector, as well as be mindful of where the formula has entrenched inappropriate stimuli or allowed short-term profit-seeking.

This research began with the recognition that further education is an under-researched area of education provision. This need not be the case for two reasons:

- There is heterogeneous set of providers, operating in a range of different markets, with varying management structures and a spread modes of provision. These providers represent a rich source for case study material, of which our explorations have only scratched the surface.
- Aggregate-level data is plentiful and accessible: five years of inspections, budgetary information and aggregate statistics are becoming available for research; these should be augmented in the future by highly specific data on students and staff.

These two research sources should be regarded as offering complementary opportunities. As we have hopefully shown above, both a bottom-up and top-down analysis of FE can be undertaken, yielding insights for both policy-makers and professionals in the sector.

Bibliography and references

Ainley, P and Bailey, B (1997) The Business of Learning: Staff and Student Experiences of Further Education in the 1990s. Cassell

Barrow, M (1996) The reform of schools funding. Some case study lessons. Environment and

Planning C – Government and Policy, 14, 351–366

Barrow, M (1997) The FEFC's New Funding Methodology. Education Economics, 5, 142–168

Batty, P (1998) Funds delivery harms teaching, The Times HE Supplement, 8–9

Belfield, CR (1998) The relationship between resources and performance in further education colleges. University of Birmingham, mimeo.

Bourn, J (1997a) The Further Education Funding Council for England. Report by the Comptroller and Auditor General, National Audit Office, HC 223. Stationery Office

Bourn, J (1997b) The Management of Growth in the English Further Education Sector. Report by the Comptroller and Auditor General, National Audit Office, HC 259. Stationery Office

Bradley, D (1996). Who dares wins. Intended and unintended consequences of the FEFC methodology. Education Management and Administration, 24, 379–388

Chadwick, S (1997) Resource dependence in the further education marketplace: considerations for the managers of college mergers. Journal of Further and Higher Education, 21, 3, 305–316

Dean, GS and Gray, DE (1998) Funding maximisation within a further education college: a case study. Journal of Further and Higher Education, 22, 1, 41–48

Dearing, Sir R (1996) Review of Qualifications for 16–19 Year Olds. Full Report, Hayes, SCAA Publications

DfEE (1995) Lifetime Learning: A Consultation Document, Department for Education and Employment

DfEE (1996a) Learning to Compete: Education and Training for 14–19 year olds (Cmnd. 3486). Stationery Office.

DfEE (1996b) Maximising Potential: New Options for Learning after 16. Taking Forward the Recommendations for National Entry Provision and National Traineeships in Sir Ron Dearing's Review of 16–19 Qualifications. Department for Education and Employment

DfEE (1997) Qualifying Success: A Consultation Paper on the Future of Post-16 Qualifications. Department for Education and Employment

DfEE (1998a) The Learning Age. A renaissance for a new Britain. Stationery Office

DfEE (1998b) Further Education for the New Millennium: Response to the Kennedy Report. Department for Education and Employment

DfEE/FEFC (1995) Skill Supply and Demand and Further Education. DfEE/FEFC Statistics Working Group

DTI (1994) Competitiveness: helping business to win (Cmnd. 2563). Stationery Office

DTI (1995) Competitiveness: Forging Ahead (Cmnd. 2867). Stationery Office

Education and Employment Committee (1998) Sixth Report. Further Education. Volume I. Report and Proceedings of the Committee. House of Commons, Stationery Office

Elliott, G (1996) Why Is Research Invisible in Further Education? British Educational Research Journal, vol 22 no 1, 101–111

FEFC (1994) Guidance on the Recurrent Funding Methodology 1994–95. FEFC

FEFC (1996) Franchising. Circular 96/06. FEFC

FEFC (1996b) Performance Indicators. FEFC.

FEFC (1997a) Annual Report 1996–97. FEFC

FEFC (1997b) Convergence of average levels of funding. Circular 97/09. FEFC

FEFC (1997c) Funding methodology: convergence of average levels of funding: review of the tariff for 1998–99. Supplement to Circular 97/38. FEFC

FEFC (1997d) Chief Inspector's Annual Report, 1996–97. FEFC

FEFC (1997e) Circular 97/31. FEFC, Coventry.

FEFC (1997f). Measuring Achievement. FEFC

FEFC (1997g) Widening Participation in further education: Statistical Evidence. The Stationery Office

FEFC (1997h) Mapping Provision: the Provision of and Participation in Further Education by Students with Learning Difficulties and/or Disabilities. FEFC

Foskett, NH and Hesketh, AJ (1997) Constructing choice in contiguous and parallel markets: institutional and school leavers' responses to the new post-16 marketplace. Oxford Review of Education, 23, 299–319

Fryer, R (1997) Learning for the Twenty-first Century. First Report of the National Advisory Group for Continuing Education and Lifelong Learning

Graham, I (1997) Principal's responses to incorporation and the new funding regime. Journal of Vocational Education and Training, 49, 4, 545–562

Gravatt, J (1997) Deepening the divide: further education franchising and the diversion of public funds. Praxis Papers 6, Lewisham

Gravatt, J and Sorrell, G (1996). Equity versus equality: the impact of convergence on colleges and students. Praxis Papers 5, Lewisham

Hemsley-Brown, J (1997) Double-disadvantage: the move towards convergent funding in further education. Management in Education, 11, 4, 66–81

Hughes, G, Taylor, P and Tight, M (1996) The Ever-changing World of Further Education: a case for research. Research in Post-compulsory Education, vol 1 no1, 7–18

Kennedy, H (1997) Learning Works: widening participation in further education. FEFC

Leney, T, Lucas, N and Taubman, D (1998) Learning Funding: The Impact of FEFC Funding, Evidence from Twelve FE Colleges. NATFHE and University of London, Institute of Education

Nash, I and Russell, B (1997) Cuts fear puts cash review in turmoil. TES – FE Focus, 7/2/97

Reeves, F (ed) (1997) Further Education as Economic Regeneration: the Starting Point. Bilston Community College

Rikowski, G (1996) Further Education Colleges in S Ranson, G Rikowski, H Thomas, A Bullock, J Martin and G Kirkpatrick, The Structure of the Education Service: A Report for Zurich Municipal. University of Birmingham

Roberston, D (1997) Agenda for Research into the Funding of Further Education. FEDA Discussion Paper

Russell, B (1997a) Principals furious at funding freeze. TES – FE Focus, 31/1/97

Russell, B (1997b) Colleges threaten to sue over cash crisis. TES – FE Focus, 14/2/97.

Spours, K (1995) Post-16 Participation, Attainment and Progression. Institute of Education, Post-16 Education Centre, Working Paper Number 17

Steedman, H and Green, A (1996) Widening Participation in Further Education: A Survey of the Issues. A Report to the Further Education Funding Council. The Publications Unit, CEP, London School of Economics and Political Science

Styles, B (1997) Outward collaborative provision: the spectre at the convergence debate. City of Bristol College, mimeo

Wymer, K (1996) Further Education and Democracy: the Community College Alternative. Wolverhampton: Bilston

Appendix 1

What explains 'aims achieved' in FE?

In a separate exercise to determine what may explain the aims achievement scores of FE colleges, an OLS regression analysis was run. The results are given in Table A1. Our findings are that, although there are distinct differences by college type, there are few differences by region (although the South East performs well), by institutional size or by college resource levels.

Determinants of aims achieved in FE (OLS) - table A1

Aims	Co-efficient	Standard error
Region (compared to the North West)		
Yorks/Humberside	0.905	(2.694)
South East	-0.709	(2.386)
South West	6.275	(2.819) *
East	-1.714	(2.800)
North	0.692	(2.994)
East Midlands	2.209	(2.774)
London	-3.490	(2.701)
West Midlands	1.037	(2.447)
College type (compared to FE colleges)		
Agricultural colleges	17.499	(3.105) *
Art colleges	21.176	(5.423) *
Specialist colleges	26.297	(8.256) *
Sixth form colleges	19.312	(1.911) *
College resource		
Average level of funding	-0.335	(0.287)
Achieved funding	-0.058	(0.053)
College scale		
Students (full/part time)	0.001	(0.000) *
Constant	74.286	(9.113)
Adj R squared		0.2587
F (15,365)		9.84 *
n		381

*1% significance

This series provides reports on research initiatives undertaken at FEDA. Projects are undertaken on all aspects of further education and lifelong learning – from staff development and curriculum topics, to the funding and management of learning. They are often collaborative efforts involving FEDA staff, college-based staff and independent research and development specialists.

ISSN 1461 2712