

The costs of alternative modes of delivery

A study for HEFCE by JM Consulting Ltd

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Summary

Introduction

This overview report summarises the results of a study we have undertaken for HEFCE into the costs of different modes of off-campus delivery of higher education. The main modes studied were foundation degrees, e-learning, distance learning, workplace learning, sandwich years-out, accreditation of prior experiential learning (APEL), and part-time study. The technical appendices provide full definitions and details of the study for each of these modes.

The purpose of the study was to identify the ways in which the recurrent costs of these modes delivered in a relatively “pure” form differ from conventional undergraduate learning. This remit meant that much of the e-learning and distance-learning in the sector, which is actually a component of a mixed-mode or blended learning experience, falls outside the study. In fact, there is relatively little provision of the “pure” form covered by the study, and the sample sizes we have had to deal with are relatively small. Our study considered only delivery to UK students by UK higher education institutions – we did not cover delivery overseas, nor delivery by commercial providers.

The aim of the study was to identify any implications for funding policy due to higher or lower costs than conventional delivery. We therefore used a comparative costing method and have not attempted to calculate absolute costs per student for any of these modes. As for conventional learning, calculating absolute costs could be much more complex because of the probable need for academic time recording, and difficulties of apportioning infrastructure and central services costs in absolute terms to different modes of teaching.

The main work for the study was done through a series of institutional visits during the first part of 2003. We visited 14 institutions covering pre- and post-1992 higher education institutions (HEIs) and also further education colleges (FECs). They included institutions with very significant amounts of distance-learning, sandwich year-out or part-time provision. We also visited or had discussions with a range of other organisations (HEIs, FECs, workplace providers, and e-learning platform providers).

The study was in effect costing different types of pedagogy. A significant amount of detail had to be considered, and the full report is therefore a long one. Each mode has its own characteristics (and cost drivers) and there will be a particular group of individuals in the sector interested in our findings on each individual mode. Complexity is added because within all of these modes there is a variety of models of provision in the sector. It is not therefore possible to identify a single typical or average cost differential from conventional provision for each mode.

We believe that this report provides one of the most comprehensive descriptions of the range of current practice in these modes of delivery, albeit based on a sample of 14 institutions. We hope this will be useful in stimulating a policy debate about the development of these modes, although it was not the main purpose of the study.

The report is in two parts. The first part contains an overview that summarises the main findings and implications of the study, followed by a chapter on methodology, and then an overview of the characteristics common to all off-campus modes. The second part is a series of stand-alone chapters covering each of the seven modes studied.

Key messages

Most of these modes, as studied in the “pure” form, are currently managed and delivered in a way that reflects the knowledge, enthusiasm and interest of individual academics, often working within a particular discipline, rather than as the result of corporate decisions or established national good practice. Many are new forms of provision. As a result, the pedagogic and resource models adopted are not mainstream in terms of the way they are managed by institutions; and their delivery models and costs may vary in ways that are not necessarily representative of what would be required or achieved in a long-term stable situation.

These comments should not be seen as a criticism of the many dedicated individuals who are involved. They are rather a reflection of the relatively recent development of strategies for teaching and learning, and the way that new developments arise in higher education.

As currently offered, most of these modes are more resource-intensive than conventional delivery in the same subjects, and their costs are therefore higher. There are two principal reasons for this: they require extra resource inputs, due to the added demands of the different types of provision; and staff are frequently involved with much smaller groups of students than for conventional provision. Partnership arrangements, new forms of assessment and different methods of communication bring extra demands on staff. Students often receive one to one support or support in small groups, to a larger extent than is found in conventional modes of study.

Much of the extra resource is made up of academic staff time. Whilst some of this is recognised in staff workload allocation systems (and therefore represents a real cost to the institution), much is “subsidised” in the sense that it is the time of enthusiasts who are already employed and choose to devote significant amounts of extra time to these modes. This extra effort is generally invisible to central management and costing systems (it does not directly create additional costs to the institution), but it is visible in academic departments who speak of the “extra burden” of these modes. Our cost models included the full costs of the time spent.

In principle, there should be offsetting savings in estates costs, and perhaps in some central services, but these are not realisable in the short term in large campus-based institutions, and any such offsetting savings are probably invisible to academic departments. However, our cost models do include these reductions.

The extra costs identified in many of these modes are most significant in band D subjects (i.e. the lowest price group for “classroom” subjects in the HEFCE funding method for teaching) where the unit of resource for conventional delivery is obviously tightest. The extra costs are less significant or negligible in the higher bands where institutions have more resource available and are more able to accommodate extra staff costs, or alter the balance of resources used. This means that the cost of provision in

different price groups is closer for many of these modes of delivery than it is for conventional provision.

Overall, therefore, we can conclude that on a long-term basis these modes are usually more costly, but need not always be significantly more costly, than conventional delivery. The extra cost is most significant in the lower price bands. However, few institutions have a clear view of all the costs involved or a fully developed business approach to delivery, and so the observed pattern of costs (as for much conventional delivery) may not represent a fully “efficient” solution. It also does not necessarily reflect the pattern of costs when these modes are part of a blended learning strategy.

Policy implications

The White Paper *The future of higher education* affirms the Government’s interest in attracting and retaining additional and new types of student, and the involvement of employers, through use of alternative modes of delivery.

As we have surveyed them, in their “pure” stand-alone form, most of these modes are however a very small part of HE provision, and as noted above, e-learning, distance learning, APEL, and workplace learning have been very much a result of individual academics’ enthusiasm. These are not generally planned or managed to a mature business model.

The creation of foundation degrees has generally been planned at a more strategic level. (Part-time study and sandwich degrees are arguably of a different nature to the other modes due to their wide-ranging and historical nature.) In some institutions APEL, workplace learning and foundation degrees are increasingly being recognised as a key plank in attracting and retaining students and involving employers. However, good pedagogic practice is still developing. Many more institutions are also developing their e-learning capabilities, but as a means to support on-campus students.

In almost all cases e-learning, distance learning, APEL and workplace learning are seen as major elements of a flexible learning model (offering choice of provision to students). However, they are of less interest as stand-alone modes (which were the focus of this study), and the scope and value of such stand-alone provision is more restricted.

To scale up provision of these modes will require various elements to be in place. Few of these relate to the level of funding. For example:

- for “true” workplace learning – the proactive involvement of employers, or at least support for placements;
- for e-learning and distance learning – academic acceptance of the sharing of good quality materials (and HE credit accumulation and curriculum structures that would facilitate this);
- good pedagogic practice – recognising different types of student, different learning environments, different methods of learning guidance and support, (incorporating the use of materials, interaction, assessment, skills acquisition, technical staff, administrative staff);

- academic acceptance of the learning benefits of these modes of delivery (not currently widespread) – which would require a demonstration of the quality of the provision to be made (which has cost implications);
- senior management vision and support;
- staff development and professional advice for academics within institutions to facilitate their development and support of these programmes effectively (and efficiently);
- significant changes to curriculum (credit accumulation schemes) and assessment pedagogy to focus on learning not teaching;
- more efficient and effective administrative systems for part-time students on non-traditional modes of delivery, particularly for those on "roll-on roll-off programmes" and off-campus students;
- workload management models and staff contracts that appropriately recognise the different style of working in many of these modes – and the increased time required to support many of these students;
- funding of academic staff time and professional expertise for the development of a) concepts and alliances (for foundation degrees and workplace learning); (b) materials (for e-learning and distance learning) .

While funding could stimulate some of these developments, it will not, by itself, remove the main constraints to development of the modes covered in this study.

Conclusions on funding

We would conclude that while these modes are clearly costing institutions more, this has not generally been the primary restraint on their growth. Their costs have generally been hidden or not understood, and the volumes of activity have been so low that any burdens on academic staff time could readily be absorbed within a department as a whole.

However, if significant growth is to take place, then the impact of costs will be higher and more visible. This will be exacerbated by the need clearly to demonstrate quality (so that the forms of provision receive support by the wider academic community). This will require extra investment in staff time to provide a higher degree of learning support, assessment and quality assurance than might in due course be required when good pedagogic practice is more clearly established.

Of course, if significant growth is to take place, it might also be expected that institutions will adopt a more systematic business model for these modes, and that their cost structures will therefore change anyway. This may well include some economies of scale, which may partly off-set the additional investment required.

In this connection, we note that the outliers in our study in terms of costs (those showing both positive and negative differentials) may be interesting examples to explore further, as they are often realising the concepts of these modes more closely, and considering pedagogic implications more fundamentally.

Overall, therefore, we conclude that:

- a. the pedagogic and financial model for these modes in their pure form is immature, and current costs cannot be taken as a basis for forecasting what they should cost if delivered in an efficient way in a mixed or blended learning approach, more typical of most provision;
- b. delivery under these modes currently costs more in most institutions than for conventional provision. This is particularly the case with e-learning, workplace learning, foundation degrees, APEL, part-time provision, and some distance learning;
- c. the inclusion of some provision through these modes in a blended learning environment, using current models of delivery, is likely to lead to higher costs than conventional provision, as the main higher-cost characteristics of delivery will still apply (partnership, development of materials, learning support "at a distance", innovation, quality assurance, administration). It is likely to lead to a convergence between the total costs of the price groups B, C and D, towards the cost levels indicated in C or B;
- d. however, for the newer modes of delivery, there is not yet a firm enough evidence base to quantify a systematic and significant cost differential (justified by quality or good pedagogy considerations), which would be required to support specific changes to the funding of these modes of delivery as a part of the HEFCE funding method for teaching;
- e. any more rapid and systematic approach by institutions to developing off-campus modes would have visible additional costs for institutions, and they may require some financial incentives to achieve this;
- f. a number of other developments will also be required to facilitate any significant growth and maturing of these modes of delivery. Some of these also have cost implications.

Findings on individual modes

E-learning (technical appendix 1)

Most e-learning is being developed as part of flexible blended learning – there is very little provision currently provided to off-campus students. It has also been developed by individual "keen" academics. There are few "professional" models, but where these exist they can offer considerable advantages in terms of pedagogy combined with a business-like approach. However, the up-front costs of development in this type of operation are a significant hurdle.

Based on a very small sample of courses, we found band B courses at postgraduate level to have costs similar to conventional provision. Courses in band D varied widely from lower to higher cost, as well as cost neutral (range: -20% to +50%). The costs varied from that of a conventional course due to:

- higher development costs (although not many courses had complex simulations; and few were at the levels of costs reported in other published research studies. However, most reflected the learning curve being experienced by the academic authors);
- face to face delivery on some courses;
- tutor guidance and support, such as emails and discussion groups. (Restricting this input is not an institutional aim in these sometimes “flagship” programmes: ensuring a high quality learning experience is);
- offset by estates/central services cost reductions (particularly if there is no face to face element).

There are three assumptions which mean that our conclusions (of cost neutrality, or sometimes cost reductions) would not be recognised by department managers, who might believe costs were higher on e-learning courses:

- in some courses external virtual learning environments (VLEs) (often including marketing fees) have added significantly to costs. However, in most of these courses we assumed that an institutional VLE was used, with no difference in costs between the e-learning courses and conventional courses. In practice this is rarely the case. The costs of providing a VLE are currently considered a real additional cost for e-learning courses;
- we have also assumed reductions in estates/central services costs – which do not happen in practice (nor are they recognised in many institutional resource allocation systems);
- we have amortised development costs. Whilst some departments operate “loan” systems to help finance development over a period of years, most do not. The full costs are seen as something that needs to be recovered over the first cohort.

Experience in this area is still emerging, and it may be possible to reduce costs in due course by:

- good practice in materials development, combined by effective communication and interaction tools;
- delivery of the e-learning materials that have been developed to larger cohorts (including for on-campus students);
- more efficient support – good administration systems, processing students’ queries in a business model;
- tightly controlled tutor support.

However, the state of understanding and development in pedagogy and academic skills across the sector are such that these would represent an unusual model in HE at present.

Distance learning (technical appendix 2)

Distance learning courses are provided by most HEIs. However, most providers support very small cohort numbers, with the obvious exception of the Open University (OU). Apart from the OU, most of the provision in the sector is at postgraduate level. In other institutions, distance learning materials are developed (and usually produced) by individual academics and are text-based.

Costs are significantly affected by:

- the type of materials and the cohort numbers they are delivered to;
- the amount of distance support provided to students by academics;
- the amount of face to face support;
- to a lesser extent, administration;
- the reduced estates/central service costs.

We found that additional development/materials costs were broadly the same as the reduction in estates/central services costs, leaving the amount of support as the critical factor which determines the cost differential. The majority of case studies were small-scale provision, and showed delivery at conventional levels (so no differential was identified). In several instances lower levels of support were found (e.g. for large scale postgraduate provision), or higher levels of support (e.g. for “flagship” courses).

Distance learning costs are broadly the same as conventional costs within the higher price bands and for postgraduate courses. The picture in band D is less clear, and we found very few examples outside the Open University of provision in this price group.

We found many band D and band B courses that showed little differential in delivery costs from the conventional courses, and this could imply that there is a differential in distance learning delivery between price groups. However, where there is no need for laboratories, there is no particular reason for band B subjects to be higher cost than band D. Our findings probably showed the impact of the resources being made available to different departments, rather than the real need.

Delivery is also affected by administration, the comprehensiveness of materials (and their effectiveness in a learning process), the students’ perceived ability to “stand-alone” (we did not link costs to retention/achievement), the costs of assessment, and academic caution. Many academics often expressly plan higher levels of support (including on-campus days), to give absolute assurance that students will receive the same quality of learning experience as on a conventional course, whether that support is actually required or not.

Costs for distance learning courses can be lower than those for conventional courses if:

- the costs of development are kept low (determined by choices relating to the volume of text and amount of original research, media, collaboration (bought-in/sold out/co-produced) as well as an individual rather than design team approach used in development);

- cohort numbers are high, so that development costs are spread amongst more students;
- one to one support is not required or is limited (with no residential);
- alternatively, the course is developed and supported by a very professional team, with sound pedagogy informing the development of materials and the types of interaction (learning guidance and support) provided. This requires considerable up-front investment to cover the costs of development – much more so than the individual academic “preparing materials in the evening”;
- the university’s and department’s administrative systems are efficient and effective when handling these types of off-campus student.

We found several examples of lower cost. However, they would not be transferable to all distance learning provision.

Foundation degrees (technical appendix 3)

We looked at 22 foundation degree courses. There are many different ways of providing a foundation degree, and we probably identified 20 different models. These included programmes which incorporated one or more of the following elements: workplace learning (with and without significant support by the workplace providers); distance learning; franchised delivery with FECs; shared delivery by HEIs and FECs; delivery at company training facilities; conventional delivery, sometimes with additional assessment or learning guidance and support. We did not include many converted HNDs in our sample, although this is likely to be a growth area.

One-third of the courses, including the three converted HNDs, showed no cost differential from the previous conventional delivery. The differentials in the other two-thirds of the courses ranged from +5% to +56% of their respective price group comparators. (One course, in distance learning, showed lower costs.)

The higher costs arose from the following. Each only applied to a sample of foundation degrees that we reviewed:

- franchising arrangements with FECs (see below);
- smaller cohorts;
- support in the workplace (where that took place);
- complexity of the provision offered (more management and administration; and also impacting on cohort sizes);
- administration.

We based our differentials on costs, not on the transfers of income to partners. The differentials for courses partly or wholly delivered by FECs depended on:

- the university's understanding of the costs to it of franchising (we note that this issue is not only applicable to foundation degrees);
- whether the course was delivered to an HEI curriculum (and hours) or that of an FEC (usually with higher contact hours than HEI norms);
- the assumption (which we made) that non-academic staff costs in FECs were at the same level as those for an HEI course.

The costs for courses delivered at, or partly delivered by, workplace providers were higher when we included the following:

- the practice trainer (or equivalent) costs – which are often not charged by organisations, or are funded by other sponsors;
- the organisation's overhead costs – environment, training facilities etc, which are sometimes charged to universities, and sometimes not.

Sandwich years-out (technical appendix 4)

Sandwich year-out courses are an important model of workplace learning. We identified three types of sandwich year-out courses:

- high-specification: strong assessment and support by the academic
- medium-specification: assessment and strong academic support
- low-specification: assessment and minimum academic support.

These categories were developed to help identify the level of academic input – the number of visits and the work preparation and assessment. We did not link these to quality, or achievement.

Costs appear to be determined significantly by the importance of the placement to the accompanying degree programme. If it is a separate award, or is integrally linked to a Year 4 research project; or has strong employer input (a high specification model), then the costs are higher. More visits are made, and assessment is more complex and time consuming.

However, irrespective of the place of the sandwich year in the programme, the costs of the placement office are of equal importance, as too are the estimates of time spent on visits. Some lower-specification placements can be more costly than higher-specification placements due to the placement office alone, and estimates on the time per visit vary widely. The difference between the highest and lowest estimates, taking these two elements together, is equal to 50% of band D conventional costs (for a 0.5 FTE student) and nearly 30% of those in band B. In addition, no overseas travel has been included – the costs of this could potentially add a further differential of +70% to the costs of teaching a particular student in band B.

“Thin” sandwich placements are more costly than “thick” ones.

Low-specification placements showed differentials of –26% to –37% (band D only). High and medium-specification placements showed differentials of +14% to –48% (band B) and +45% to –3% (band D). (Sandwich year-out costs expressed as a percentage of 0.5 FTE of the standard costs of a conventional course.)

The difference between subjects is not caused by the normal factors that differentiate between the costs (i.e. laboratory costs, including smaller cohorts, and increased contact time). It is more likely to be a factor of the resources that have been made available to those academics. Despite this, the cost differentials indicate that the costs of band B and band D sandwich year-out courses are closer than the current HEFCE price bands indicate.

Workplace learning (technical appendix 5)

Workplace learning is difficult to define in any robust way. There are issues concerning both the definition of an activity that meets “workplace learning” criteria, and how the amount of this activity can be measured.

We identified four broad models:

- i. no academic support at workplace (only occasional visits for quality assurance);
- ii. some academic (didactic) delivery at or near the workplace;
- iii. learning support and guidance provided by academics to students at the workplace;
- iv. workplace staff providing significant delivery and assessment.

The last two could be considered “pure workplace learning”. Outside clinical practice (health), initial teacher training and social work, there is very little of this in the HE sector. Academics rarely deliver and assess in or near the workplace, and there are few instances where workplace managers provide significant amounts of learning guidance or assessment to students.

All four approaches can mean additional cost. In particular, where a student is significantly supported or assessed in the workplace, costs are generally higher than for a conventional course. The additional costs are significantly due to: the smaller cohorts on the course; the extra time required to travel and visit an individual student in the workplace or for project support/assessment; administration; and the time required to market and contact employers where they are to be actively involved.

Costs can be lower where workplace managers contribute significantly to the students’ learning guidance or assessment at no cost to the university; or where training facilities are provided at no cost (either for academic delivery of a taught programme, or for use by a student on a distance learning programme). We found very few examples of this.

Accreditation of prior experiential learning (technical appendix 6)

APEL here covers prior experiential learning, but not prior certificated learning. There is a wide range of APEL procedures in institutions. Not all departments in any one institution handle APEL, nor do all institutions.

APEL is currently used by many departments as part of their admissions procedures for students – particularly to postgraduate courses or for non-traditional students to undergraduate courses. However, this is commonly a process designed and carried out by each department individually, and often is not much more than an “informed judgement” based on a CV or application and perhaps an interview.

APEL is used more rarely to grant exemption from specific modules on a programme, or a whole stage (year/level) of a programme. The student’s APEL application is considered a learning process in itself, and in some institutions the review of their APEL claim constitutes a (funded) 10-15 credit module. This can be a very costly module (in terms of staff time), particularly if the number of credits claimed is large. In some institutions, the APEL process is carried out for each module for which exemption is being claimed, leading to a closer recognition (in funding) of the costs of handling an APEL process. In health, students undertaking APEL can sometimes be funded (by Workforce Development Confederations) at the same rate as the FTE student who is taking the comprehensive suite of modules.

There are a few instances of full APEL processes being carried out which do not form part of a module. Direct entry to Year 2 is an example. Costs would be incurred by the department, for which there is no funding. This could be considered a cost of recruitment.

The volume of APEL in the HE sector is very small. It is regarded by many as a difficult and different process, especially with the need to ensure comparable quality of the outcome when compared to a traditional teaching process. It does however allow individuals’ prior learning (experiential and the full range of certificated learning) to be recognised on entry, and students’ subsequent learning time for a qualification potentially to be reduced. If this approach was to be expanded, then any barriers to the increased use of modules to provide a framework (and funding) for the APEL work would need to be explored. However, the main pre-requisites would be:

- a modular credit-based system;
- an institutional strategy with regards to APEL (in conjunction with certificated learning), including acceptance of APEL – in terms of pedagogy, curriculum, and quality – as a means to fulfil some of the programme’s learning outcomes;
- good pedagogic practice to inform this;
- institutional processes and frameworks for handling APEL;
- training available for academics;
- specific publicity of this option to potential students.

It is unlikely that such initiatives are best developed in isolation. The accreditation of prior certificated learning would be part of the process, and it would be made even more useful if it was part of a process of individualised learning – where gaps in an individual’s portfolio could be made up by the most appropriate method, managed through individual learning programmes. Some examples of this are covered in the work-based learning

chapter. This would be more costly than conventional provision.

Part-time study (technical appendix 7)

Part-time covers a wide range of types of provision. Our report only relates to courses involving significant periods of study leading to degrees or other major awards. These courses were generally offered to part-time students in parallel with the same provision for full-time students. We have not looked at costs on very “low intensity” part-time provision such as short-courses, summer schools and taster courses, where the nature of the student experience, and the cost structures, are very different.

The costs of teaching the types of part-time students we have reviewed are higher than those of the equivalent proportion of full-time students due to three factors:

- administration costs are often higher for a part-time student (headcount) than they are for a full-time student;
- cohort sizes in evening and weekend study are generally smaller;
- pastoral support can be the same for a part-time student as for a full-time student.

We have not considered any additional cost arising from any increased attrition amongst part-time student cohorts, although we have been told that it exists.

The costs available for the study were not robust, but an indication of the impact of these three factors on a part-time student in price group D gives differentials from that of a full-time student of 39% (on the total costs of a 0.4 FTE) and 15% (on the total costs of a 0.7 FTE). Slightly higher differentials could be calculated for students studying in the evening and weekends.

The level of additional costs would vary by discipline, the type of the student cohort and the department’s teaching style. These figures should be regarded as an indication of the maximum likely differential, with a lower differential applying to some students and some institutions.

The cost variations would not generally vary by price group. The differential in band B is therefore likely to be on average half the size of the differential on band D (expressed as a percentage of conventional delivery costs).

The additional costs of part-time provision identified here were in general included as part of each differential calculated on the other modes of study reviewed in this report. They should not be added to the differentials already indicated in the other appendices.

1 Introduction and methodology

Introduction

- 1.1 This study was commissioned in October 2002, with the aim of informing HEFCE's review of the funding method for teaching.
- 1.2 The current funding method for teaching takes account of observed differential costs related to subjects of study, and factors related to the nature of the students and the nature of the institution, and mode of study (whether it is full- or part-time). The purpose of the research was to provide advice and evidence to inform the funding method for teaching in two areas:
 - a. whether and to what extent HEFCE should also take account of the nature of the delivery of teaching and learning, beyond subject of study and full- or part-time mode. In particular the study was to consider teaching and learning that is delivered off-campus. Evidence was to be produced about the relative costs of the following modes and types of delivery:
 - distance learning
 - e-learning
 - workplace learning
 - work placements (sandwich years-out)
 - foundation degrees
 - and whether the part-time premium adequately takes account of the additional costs incurred by part-time delivery
 - b. the case for funding the accreditation of prior or experiential learning where this substitutes for learning activity.
- 1.3 Working papers were presented to four meetings of the Steering Group.

Approach

- 1.4 The course team studied a range of costs for courses that are currently being presented (and in addition other courses being planned, or discontinued). In-depth discussions with academics responsible for the development and presentation of those courses gave information about the cost drivers (and the underlying pedagogy).

- 1.5 These courses were presented by a sample of 14 institutions in the English HE sector, including the Open University, another institution with wholly part-time provision, and two pre-92 institutions. At each institution a sample of courses was reviewed, covering various modes of delivery, and a wide range of models of delivery within each mode. Both postgraduate (taught) and undergraduate courses were included, covering subjects in price groups D, C and B¹. In parallel, a review of some of the key literature about costs of each mode was conducted, although a full literature review was not carried out. This is not an academic study, but a costing study.
- 1.6 HEFCE undertook a brief survey with all HEIs in England in October 2002 to estimate the numbers of their students who studied primarily off-campus. This survey sought information about the current levels of provision in workplace learning, distance learning, e-learning, AP(experiential)L and AP(certificated)L. The results of the survey were drawn upon during this study, and are summarised in this report.
- 1.7 The study methodology identified the cost differentials for each course studied, from that of a conventional course. It did not calculate the total costs of each course.

The costing method

- 1.8 We established the standard cost of a conventional course for each of band D and band B subject areas. We drew on the average costs of programmes provided by four institutions (which were based on a sample of band B and band D departments). This provided a wide range of results; these were then informed by “standard” costs derived from data gathered from academics and managers in institutions over a number of previous studies², as well as from information gathered from programme comparisons during this study.
- 1.9 We analysed this data into major cost elements (i.e. academic staff time comprises 30% of total costs, estates comprise 15% of total costs). Other cost categories were: secretarial and technicians; departmental non-staff; library and IT; and central administration. We further analysed academic staff time into five categories: preparation and development (of materials); delivery and learning guidance and support; assessment; pastoral support; and management and administration. This provided a standard cost for a conventional course, for each of bands D and B.
- 1.10 In the absence of any more accurate information, band C costs were assumed as midway between those of bands D and B, and long courses were assumed at 125% the cost of other courses.

¹ Bands are based on the HEFCE price groups, as described in HEFCE 2003/29 *Funding higher education in England*.

² Particular reference was made to a number of consultants’ reports prepared by J M Consulting, most notably: *Study of Comparative Costs of First Degree and Sub-Degree Provision*, for HEFCE, December 1999; *Efficient Cost of Teaching*, for SHEFC, December 2000; and *Provision of Standard Pricing System for NHS Non-Medical Education and Teaching Contracts*, for the Department of Health and Universities UK, January 2003.

- 1.11 Conventional and off-campus costs were compared within an institution, therefore London weighting was irrelevant, as were the additional costs of historic buildings, any different costs of specialist institutions, or differences between pre- and post-1992 institutions.
- 1.12 Since costs vary across a wide range, the conventional cost assumptions are unlikely to reflect the “actual costs” of any one programme. In practice, institutions very rarely calculate the total actual costs of each of their programmes in the detail that we required for this study. The difference between actual costs and our standard “default” cost is therefore not known.
- 1.13 For each programme studied, we identified the resource inputs made by the academic department – mainly academic and administrative staff – through discussions with academic managers. This was compared either in terms of number of hours, or by way of weighting (i.e. “administrative input is twice as much”).
- 1.14 Where a directly comparable programme was provided by that department using a traditional or conventional mode of delivery, we replaced our assumptions for academic staff time (delivery) in our standard conventional cost model, with the actual time required for that course.
- 1.15 For courses where there was no direct comparator (some foundation degrees, e-learning, distance learning and work-placed learning courses, all APEL, all sandwich years-out) the academic staff contact time for the conventional model was assumed to be at the standard cost level.
- 1.16 Even where there was a comparator course, there was little data available on the actual time required for non-contact activity (preparation, assessment, administration and management) and for pastoral support. We then used the assumptions included in the standard model.
- 1.17 We then applied standard costs per hour to the academic contact time (an unbundled £30 per hour³ or a bundled £100 per hour if the contact time had to be used as a proxy for other student-related time, such as pastoral support, administration, assessment etc⁴). This gave a total academic staff cost for the non-conventional programme that could be compared to the cost of academic staff time for a conventional programme. A cost differential between the two types of programme, for academic staff time, based on actual time and standard costs, could then be calculated.
- 1.18 Non-academic staff costs covered departmental administration, departmental non-staff costs, and central costs separated into estates, libraries and IT, and central services. These were not available by programme. Even where they were available at a departmental level (i.e. an average for each student FTE), the cost drivers were not always very robust. We therefore used the standard cost

³ £40,000 plus on-costs divided by 1500 hours available for work after holidays and staff development/scholarship.

⁴ A similar salary cost divided by 450 hours which is a common total of timetabled/scheduled contact hours for an academic in HE, out of the 550 contract hours (where this applies).

assumptions for both the conventional and non-conventional courses.

- 1.19 We identified any non-staff costs that would be in excess of those required for a conventional programme (e.g. travel costs, advertising, placement office, printing). We discussed administrative and clerical staff input and applied a weighting factor to the standard costs in this area, depending on whether this was more or less than the administrative support provided on a conventional course.
- 1.20 We did not assume any difference in the costs of ICT or library services between off-campus and conventional courses. In practice their use will be different: for example, library services often have a specialist department to support off-campus students. Off-campus use of ICT will depend on the institution's VLE, and we cover this further in chapter 2.
- 1.21 We assumed that the non-conventional programmes bore the same level of all other central services costs as conventional programmes, including those for estates, unless these programmes were provided off-campus. In that case we deducted 15-25% of total costs (depending on the band) if students were completely off-campus, and 5.5% to 12.5% if off-campus for a significant part, but not all, of their time. This related to:
 - a) the academic estate not required. As a considerable amount of HEI estate is required for support, not for student use, then we only deducted 60% of the total estates cost, not all of it;
 - b) 40% of central services and technical staff /consumables costs.
- 1.22 This gave cost differentials against each non-academic staff element of cost and a total cost differential was then calculated. The method is summarised in the diagram overleaf.
- 1.23 This method was used for e-learning, distance learning, foundation degrees, APEL, workplace provision and sandwich year-out courses. Part-time provision was based on a similar standard cost model (for a conventional FTE), but the differentials were established using a different method. This is covered in appendix 7.
- 1.24 We did not include the costs of developing the concept of the new mode within an institution, nor any exceptional initial costs of setting up arrangements with partnership organisations. The subsequent costs of maintaining these relationships was included.
- 1.25 The development costs of e-learning materials and distance learning materials proved a significant cost item, and we calculated a differential on this from the preparation of a conventional course, annualised over the life of the materials before significant update, and by the number of students. If possible, differences in annual costs of updating were also reflected. The development costs were calculated on the basis of staff salaries only – no indirect costs (estates etc) related to those staff were included. If they were, most of the distance learning and e-learning course differentials would increase by approximately +10% (of total costs).

Programmes with comparative courses ⁽¹⁾

(Covers many e-learning and distance learning programmes, some foundation degrees)

Cost type	% of total costs			Conventional course total	Non-conventional course total
	band D	band B			
Contact time	13%	9%	hours	actual	actual
			cost/hr	standard	standard
All other academic staff time	27%	21%		standard	actual or weighted std
Other academic dept costs	10%	20%		standard	adjusted standard
Estates	10%	15%		standard	standard less off-campus element if applicable ⁽²⁾
Libraries and IT	10%	10%		standard	standard
Other central services costs	30%	25%		standard	standard less off-campus element if applicable ⁽²⁾
	100%	100%			

⁽¹⁾ For programmes without a direct comparator – sandwich courses, many foundation degrees and workplace learning courses, APEL, some e-learning and distance learning courses – we used the above approach, except that standard rather than actual contact time was used for the conventional course.

⁽²⁾ Differentials for off-campus provision were calculated at a standard 15% for band D and 25% for band B (of total costs).

1.26 We give some detailed costing assumptions in chapter 2 (off-campus provision) concerning the learning environment and administrative systems.

1.27 Other major assumptions, particularly concerning foundation degrees, are that:

- a) There is no differential between a programme delivered in an FEC and one of the same level and band that is delivered in an HEI. This is based on the implicit assumptions built into HEFCE's current funding model (perhaps with a slight caveat regarding directly funded band B courses), and a study completed for HEFCE⁵.

We found during our study that although the hours delivered (in an FEC curriculum) are higher than those in an HEI curriculum, there is less other student-related time (non-contact) by staff than in an HEI, and class sizes are generally smaller, at least in Year 1 in an HEI or in a modular system in HE. We carried out some indicative modelling on this, and found that the number of direct contact hours per student can therefore be higher in an FEC, however, the cost per contact hour is lower (due to lower academic staff pay scales; and a higher number of scheduled contact hours in a year).

This is an important assumption, as many foundation degrees are franchised and the university costs of franchising can often add 12% to 30% to total costs, even if the course is wholly delivered by the FEC. The balance paid to FECs is less than 100% of the full funding yet they often deliver all of the curriculum. Many HEIs make the assumption that FEC costs are less than a comparable programme in HE. This can be the case particularly on foundation degrees where an HEI's curriculum is being delivered (the hours delivered in an FEC are therefore fewer than on their conventional courses). In practice cohort numbers were often lower than the normal FEC delivery, so costs per student were calculated at the same level.

We assumed that all other costs in FECs were the same as those for an HE course, including estates and other central services costs.

However, the cost differentials reflected the costs of franchising. HEIs' "share" of the total income on a franchised course is often considered by the HEI to be at levels that might cover their costs. These costs might include

- added costs from the joint development of material;
- joint planning and review group;
- management of the programme and liaison with the FEC;
- advice and guidance on all matters regarding the development, validation, review, assessment and general conduct of the programme;
- validation procedures and annual monitoring and periodic review; academic audit procedures, including subject review and institutional audit;
- assessments considered by the university's subject and programme

⁵ "Costs of higher education provision in further education colleges" (2000), HEFCE Report 00/16.

assessment boards;

- external examiner;
- maintenance of full student records and fees;
- co-ordination of joint delivery, shared equipment etc.

(Where there is shared delivery, the costs of this were specifically known by the university and were dealt with outside the normal franchising percentages quoted to us.)

There is little robust cost information available in this area. Universities retained between 12% and 33% of total student income to “cover their costs”. The income of course varied by price group, yet it was unlikely that the cost of franchise arrangements for two students differed between subjects. We have shown ranges in the calculated differentials to allow for different interpretations of university franchising costs.

Arguably issues raised by this are relevant to all franchised courses, and do not particularly arise here as something unique to the foundation degree mode of delivery.

- b) Workplace organisation costs are generally not included. This is particularly relevant in foundation degrees and workplace learning. They have been included where the organisation makes a significant input to delivery. In such cases the organisation may have been paid by the HEI for this (in some foundation degrees) or not. However, only the direct costs of delivery, and associated indirect costs have been included in these costings. The lost productivity of students (who are also employees) has not been included.
- c) Costs borne by students have not been included. These can include travel, printing and IT (particularly relevant in e-learning); as well as childcare and accommodation; and salaries foregone.

1.28 We note that overall, the quality of the cost information by programme available to us was not high, although cost information in institutions has improved considerably from prior years. In part at least, this is due to the new disciplines of the Transparent Approach to Costing, and the increasing attention paid to “business” principles by academic managers. Individual academics however rarely had a fully comprehensive picture of their income and costs, and not at programme level. Where they did have a view of comparative differentials, these were not necessarily “accurate” as academics generally:

- are more focused on the outcome of their internal resource allocation model rather than the totality of costs or funding streams. (For example, many did not know the HEFCE income; and the Transparency Review of Research data on departmental costs and income was not yet available);
- had no clear picture on the costs of teaching a conventional course;

- found it difficult to discuss allocated time (in the workload models) in terms of real time, and to reflect the impact of cohort sizes in translating contact time to the time per student;
- had no method of recognising exceptional investment (for example in developing materials) or ways of amortising this;
- were influenced by direct funding streams (distance learning was perceived sometimes as less costly because it made a higher contribution – in fact this was predominantly caused by the higher fee income from overseas students).

Robustness

- 1.29 We used a “full cost” method that ensures that the costs of all academic staff time are included, as well as an appropriate allocation of institutional central services and estates costs. Neither of these is normally taken into account in institutions, although more robust course costing models are being developed.
- 1.30 There is a considerable amount of estimation involved in the figures on each course studied. However, the likely direction and size of the differential was discussed with each academic.
- 1.31 There is such a wide range of delivery used for a conventional course that the significant reliance on a calculated set of costs could itself lead to a lack of robustness in a calculated differential. However, this is mitigated as:
- the academic contact staff time in the model could usually be replaced with one based on fairly detailed figures given by each academic; as could other departmental spend when different (13% and 10% of total costs in bands D and B respectively);
 - although other academic staff time was often calculated either in a detailed way (e.g. time on learning support and guidance, preparation), often a broad weighting was applied to standard costs (e.g. administrative load is twice as heavy as on a conventional course);
 - there is generally no differential in central service cost elements – library, IT, estates, other central services (50% of total costs);
 - we were able to obtain academics’ qualitative views on the overall direction and magnitude of the differentials, to confirm our more detailed calculations.
- 1.32 Overall, the differentials give a good indication of the range of costs we found, and the direction and order of magnitude of the difference from conventional courses. They should be regarded as indicative, not precise. Each could be replaced by a “reasonable alternative” which carries an additional 15% differential, either higher or lower (i.e. a +10% differential as shown might be +25% or –5% if different judgements are made). Given the wide range of models within each mode, and the range of differentials that are resulting, and as only consistent and significant

differentials (i.e. consistently 40-60%) might arguably be reflected in a funding model based purely on cost recognition, we have concluded that this does not detract from the overall findings of the study. If more accurate information is required then some of the figures produced from this study could be substantiated through a very detailed time recording and cost allocation exercise. However this would still face difficulties because of:

- a) the variations in the cost of a conventional course, including variations between years, programmes, departments and institutions; and
- b) the many different models of delivery that are used for these non-traditional modes of provision.

2 Off-campus delivery

2.1 Several of the modes of delivery covered in this study encompass off-campus delivery. Delivery here is defined as the student accessing teaching and learning materials off-campus – this might be:

- through hard-copy – distance learning (distance learning);
- through electronic means – e-learning;
- in the workplace – workplace learning;
- foundation degrees might contain some element of the latter.

Almost all off-campus delivery is provided to part-time students.

2.2 These off-campus modes of delivery share some similar characteristics. These relate to the e-learning and distance learning modes of delivery in particular.

Student learning, guidance and support

2.3 The student's presence off-campus does not mean that they need less support. Some cohorts might require less (e.g. the "early retirees" category quoted in appendix 7. Many, however, need the same level of support. Merely providing materials through a remote means (remote from personal contact) is not adequate, even though the materials may be of very high quality (generally higher than lecture slides/handouts; and often including all textbook material required for the course).

2.4 Students need personal contact, for example to help explain information that they do not understand, to monitor their progress (and identify and support struggling students), and to provide feedback on their assessed coursework. "It is more difficult to give reassurances on email," as one interviewee put it. This type of guidance is provided as an intrinsic part of an on-campus student's experience as they attend lectures, seminars and tutorial groups, and drop into the department's office (or formally book a meeting).

2.5 Off-campus students often pay their own fees, and they expect a level of personal guidance (albeit by telephone or via email) that may well surpass that received by an on-campus student. In addition, many off-campus students find contact with their peer group and opportunities for group work to be a valuable support to their learning experience (through conferences or face-to-face meetings).

2.6 Overseas, local educational institutions often provide local face-to-face support to students on e-learning and distance learning models, such as those operated by several universities' distance learning courses. This local support is not generally approved by the UK institutions delivering the courses. This type of distributed learning model is not common within UK higher education. A notable exception is

the Open University's tutor system which provides local face-to-face support for their open learning (distance and e-learning) courses, but through its own tutors, not local HEIs.

- 2.7 By way of contrast, the Scottish Interactive University expects local institutions (schools and FECs) to deliver the courses that they make available on-line. It is the Interactive University's view (proven perhaps by their recruitment – 57,000 students at all levels of post-compulsory education – and success in retention and achievement) that on-line tutorial support does not give much value without face-to-face support. (They include in this definition a range of activities, from learning and pastoral support, to going to the pub and sports activities.) Without this face-to-face support they believe that the student will not achieve the required quality of learning experience.
- 2.8 Many part-time off-campus students require more pastoral support as they come up against life changes and challenges that are affecting their learning experience. Others, particularly the work-based level I students, can need additional help with their learning skills. Without this, these students may be in danger of failing.
- 2.9 Postgraduate or post-experiential students who are in employment are often taking professional or employment-related courses that are important to their current career prospects – they can be highly motivated but can expect personal support to help them achieve their goals. Experience in this seems to vary very widely.
- 2.10 Students on science-based subjects can undertake a considerable amount of "laboratory experiments" electronically, or via paper, or by using kits or home (kitchen) equipment. However, many academic managers find that their particular science subject still requires face-to-face time in laboratories. This means that a number of distance learning and e-learning courses include a residential component in their provision.
- 2.11 One-to-one delivery by telephone and email can be, and generally appears to be, more time-intensive (in terms of a lecturer's hours per student) than a group seminar or tutorial session. There are ways of providing this efficiently. Protocols for student support can be key to efficient and effective delivery, as can other "commercial" techniques:
 - response times for telephone calls and emails;
 - clear guidance on university support on students' technical IT problems;
 - administrative queries answered only by clerical staff or graduate teaching assistants;
 - routing emails with academic queries through discussion boards rather than the academic answering them individually;
 - a 24/7 call centre (or at least one that recognises the top and bottom hours in different time zones) staffed by (least costly) graduate teaching assistants;
 - regular monitoring and management of discussion boards;

- protocols for chat rooms: rules for interrupting discussions, responding to every point raised, maximum response times etc;
 - even the use of group emails (for single transmission of a standard message) - which is not yet available to all academic departments.
- 2.12 However, generally academics do not wish to constrain their students and will try to offer a level of support that is commensurate with their individual needs. This support can be provided one-to-one (telephones and emails) or by organised conferences or chat rooms. Discussion boards or “virtual conferences” can be a powerful tool in connecting a large number of students, particularly if they have a multi-threading capacity (ability to maintain a number of different discussion topics in parallel). These may save academic time in answering individual emails; academics draw together common themes and answer queries only once. However, they still need management and moderation by academics. Asynchronous chat rooms (real-time) are also an important technique. However these only work well for a very small group (six or seven students).
- 2.13 All of these techniques - telephone, email, discussion board moderation and chat rooms - can be compared to the face-to-face delivery time and support provided on a conventional course. The latter can have very large numbers, often in a large lecture room being taught by one academic.
- 2.14 Dissertations are always a time-consuming part of Masters courses, requiring significant effort, as they are often a third of the 180 credit course. They can be even more demanding of an academic’s time for an off-campus student as students can more easily provide several drafts or chapters to read, rather than the one or two drafts generally allowed for on-campus students.
- 2.15 This means that delivery, and pastoral support on an off-campus course (which might amount to some 15 to 20% of total costs) can be as much as, if not more than, a conventional course. Because of the importance of this element to a student’s successful learning experience, academics often build in mandatory workshops (for example, for foundation degrees) or voluntary residential workshops. These can be very labour-intensive to hold.
- 2.16 Academics often emphasise the high level of support (academic time) required for off-campus students. Without this, their dissatisfaction can be high, and they are more likely to fail (it is easier to notice a student not appearing for their seminar than it is a student not reading their distance learning study guide).
- 2.17 Academics particularly wish to ensure that off-campus students are not disadvantaged by their location; there may be some element of over-compensation as a result. It does mean that academics are provided with at least the same amount of time (the same student staff ratios) for delivery to, and support of, these students as they are for on-campus students.

- 2.18 There are five other factors that mean that the academic staff time spent on supporting these courses can easily be higher than on a conventional course:
- i. the nature of these courses has often meant that they are “flagships” for the department. They are part of a whole portfolio of offerings, and a quality distance or e-learning course can prove a powerful publicity (and therefore recruitment) tool.
 - ii. few academic departments are in it for commercial reasons. Those that are, are often isolated units (not called departments) in pre-92 institutions, and are rarer now as those institutions have focussed so intensively on research. Some continue as commercial operations, and are successful in their recovery. Other academic departments may offer only distance learning provision, but they generally bear the costs of an infrastructure designed for on-campus students. The full costs of these are still rarely known to academics, and their notion of a profitable operation may actually mean break-even in reality, or be assisted by overseas students’ fees.
 - iii. many of these courses were started because of an academic’s interest in the area, or in the development of e-learning, and these academics contributed personal time (above any notion of a “paid week”) to producing course materials. This commitment often continues in the support they provide to their students. These courses are small in number, so the total time requirement may not be burdensome at a department level. Academics anyway acknowledge the enormous range of effort required to teach on-campus programmes. Each taught programme may be allocated the same number of contact hours in the academic’s workload, but the actual effort will be significantly higher than the norm if it is a level 3 course – with individual projects – or a course with large numbers of students and therefore a heavy assessment load.
 - iv. most academics have an eye for the lucrative overseas or professional/employer fee-paying market. This requires quality products, flexible platforms (transferable materials), and a good level of support. All of these lead to pressures to increase resource inputs (and therefore costs), not to lower them.
 - v. academic managers who are seeking to scale up or roll out non-conventional delivery across the institution need particularly to convince their peers that these forms of education and learning are as robust in educational terms as conventional delivery. This means that the support provided to students, and the amount of assessment undertaken, as well as the quality assurance procedures followed, can be more onerous than for a conventional course. This applies to non-conventional courses provided both on and off-campus. If and when these modes of delivery are embedded in institutions, and good practice is available, then this extra burden of “proof” may be lifted.
- 2.19 Conversely, on many postgraduate programmes with significant student numbers, academic staff time can be less, with more junior staff providing learning guidance and support (leaving the senior academics who have developed the programme to carry out research), and strong and professional dedicated administrative teams providing general student support.

- 2.20 Overall, the quality (and quantity) of the learning support provided to off-campus students has meant that their learning experience can be better than that of on-campus students. Several academics remarked that they know their off-campus students much better than their on-campus students.

Preparation/materials development

- 2.21 The cost of preparing materials can be much higher than a conventional course. Several academics suggested that this might be due to the poor quality of the conventional materials, as well as to the need to produce “publishable quality” teaching material in hard or electronic form, and to come up with robust solutions to issues around copyright and technical accuracy (e.g. in diagrams). Other issues affect off-campus preparation costs, and these are covered in the e-learning and distance learning appendices. Off-campus materials also tend to need significant updating on a more regular basis.
- 2.22 Overall, preparation time for a given module or programme is likely to be higher than that for a conventionally delivered module. The annual costs per student (perhaps around 5 to 7% for a conventional course) are therefore likely to be greater unless cohort sizes (the number of students accessing the materials in any one year) are large. This is illustrated in the e-learning and distance learning appendices.

Assessment

- 2.23 We found no intrinsic reason to believe that the number of assessments on off-campus provision should be different, although the methods would be. New assessment methods are often being used, which are considered by the academics introducing them to be pedagogically superior. In some cases (e.g. students’ self-assessment) this might take less of the academic’s time. However, we note that examinations, held in local settings, are still common in distance learning.
- 2.24 In general we found that academics take longer in a distance context than on a conventional course, to assess a similar piece of work. This is due to the common practice of providing individual feedback to students in a more complete form, in writing, rather than providing more cursory comments in the margins of an assignment and following this up with a verbal feedback to a seminar group. Assessment time was typically 50% to 100% higher for off-campus students and this can comprise around 5% to 7% of total costs.

Administration and management

2.25 Off-campus students are “different”. Few institutions (the OU is of course a notable exception) have administrative, financial and academic processes that were designed for off-campus students. Recruitment, enrolment and registration; fees; ID cards; course progress information; notification of cancelled arrangements; the handing in and return of assignments – all these processes fit a normal on-campus student. Enrolment and admissions processes are designed for a student who is physically present in the institution and who walks from room to room handing in papers and ID cards. Queries about payment are handled face-to-face in academic offices. Assignments are physically handed into department pigeon holes. Flexible start dates meet the needs of many part-time students better, and certainly the needs of students taking part in off-campus roll-on roll-off programmes such as those based around negotiated workplace learning, or University for Industry learning through work schemes, or where students are assessed in workplace settings.

2.26 Administration was considered to be a critical challenge by many academics. As one of our interviewees put it: “It is far easier to lose more students in off-campus modes, and to lose them more randomly than it is to lose students who are (meant to be) on-campus where patterns are clear. It is more difficult to identify that they have been lost.”

Administrative support to students - including significant proactive contact - is considered by some to be as important to the students’ learning experience as academic support.

2.27 Everything has to be done differently for off-campus students, and this can have a significant impact on departments’ administrative time, for both academic and clerical staff. The problem is exacerbated, as most institutions do not have fully integrated student records, financial, and academic administrative systems. The gaps that this produces cause additional problems when the students are not physically present.

2.28 Some individual departments with large off-campus provision have overcome this by designing their own systems and processes. Dedicated staff handle the administration of off-campus students. “Home-grown” IT systems (complete with server and IT technician) replace or duplicate some of the central systems. This is only possible where a course has been running several years, and has large cohorts. It incurs significant cost.

2.29 Despatching materials can take considerable time and effort in copying, printing, collating and posting. Most courses deliver small quantities of learning material at a time, rather than the whole course. One 30-credit, level 1 band B course that we studied in the OU comprised 87 items. This introduces storage issues. Some reproduction and despatch costs (for example, £30-50 for a learning resource pack required for one 20-credit module) are recovered through additional fees charged to students. Some academics are seeking to reduce these costs by producing them on CD-rom; a CD-rom costs only 50p to copy once the master is cut, itself no longer a costly exercise if it is just a copy of text.

- 2.30 Organising residential weekends adds to administrative workloads.
- 2.31 Academic administration and management time, and clerical time, can account for some 13% of the total costs. This is likely to be higher for off-campus students.

Estates and central services

- 2.32 Off-campus students, however, do not generally use the HEI estate. We have assumed that if a student does not come onto campus for formal teaching then 40% of estates costs are no longer included in their total cost. If a student is on-campus for more than a day or so of teaching, i.e. mandatory or voluntary workshops, then the deduction is only half of this. These are significant assumptions in the calculation of cost differentials.
- 2.33 Not all estates costs were deducted. Academic and clerical staff require space, as do library and central services. Academic staff require laboratories so that they can carry out the research and scholarship that informs their teaching. This can be very important for postgraduate students, and for many undergraduates, as academic study can often provide the data referred to in the materials provided to them. Most of the estates in HEIs are for support (not direct teaching or research), even after residences and catering have been excluded (60% of institutional non-residential space is not used for teaching, research or other activity, but is support space⁶). We note that the OU's premises costs comprise 8% of its total expenditure, compared to 11% for the sector as a whole (the OU estate includes regional offices and tutorial space, which account for a quarter of its total space, as well as academic space including that used for research).
- 2.34 Library provision varies widely. Many courses contain all the learning materials required for the course. However, this requires the accessing and reproduction of articles and book chapters or writing a textbook or its equivalent. Alternatively, central library services may support distance learning students through special service units that can operate a postal service, perhaps acknowledging the extra time required to return a book, sometimes travelling to remote delivery sites to support small cohorts, or sometimes providing additional library material (e.g. copies of journals) for a specific course locally for the students (the latter two are foundation degree examples). Library and IT costs have not been reduced for off-campus students.
- 2.35 Most other central services costs are generally required for off-campus students, with the exception of services such as the student union and sports facilities. We have assumed that a notional 30% of the total of other central services costs are not required for off-campus students.
- 2.36 For band B subjects, the overall deduction for off-campus students for estates and central services is assumed also to take into account the lower requirement for some types of technical staff and some consumables.

⁶ *Study of Science Research Infrastructure*, J M Consulting for the Office of Science and Technology, December 2001

2.37 Overall we have assumed that the differential to recognise off-campus students is –15% in band D, –20% in band C, and –25% in band B. These differentials are halved if the students are on-campus for some of their time. These savings are not generally built into institutions' resource allocation models, therefore would not be recognised as “real” by many academics managing these off-campus programmes.

Size of course

2.38 Many off-campus courses are shorter than a full-time course (defined as 360 credits, or even a full year of credits i.e. 120). It is rare to find a full undergraduate degree delivered in this mode. Postgraduate degrees by distance learning are, however, fairly numerous.

2.39 Most e-learning covers one module in a year's provision. This might be the more academic (rather than practical) subject in a laboratory-course. It might be taken by students on- or off-campus (they are on-campus for most of their received teaching). We have included some examples of these courses in our differentials (see e-learning, appendix 1). However, most of the learning support, pastoral support, laboratory experience and peer interaction is being provided in other modules. This can reduce any additional costs associated with e-learning.

2.40 Some foundation degrees (whether on or off-campus) are funded as long courses. We have included this as an assumption in the differential calculation.

Target audience

2.41 We have already mentioned academics' desire to produce quality, comprehensive, transferable materials (or flexible e-materials that can be accessed on any platform).

2.42 Aiming at the overseas market can increase costs due to these factors. Complete self-sufficiency amongst students (“anyone in the Himalayas can take this” as one academic put it) requires comprehensive sets of materials. Open access materials can require rewriting existing course material to recognise different cultures, or to remove any specific references to UK-only databases (e.g. Census data), and may demand new assessment methods (for example, for students not accustomed to examinations).

2.43 However, it can also keep costs lower to some extent: the accessibility issue limits the appropriateness of graphics that require broadband and streaming; and means that mandatory workshops are not an option (they are often made voluntary).

2.44 However, if overseas students are a significant actual or potential part of the student population, then this will allow higher fee income to be built into the business model (or equivalent) for the course. This can facilitate the spending of higher sums than on UK courses. Our costing method avoided courses offered mainly to overseas students, and excluded any costs specific to overseas students. Nevertheless, it will have been affected by their presence, particularly in the area of postgraduate provision. The differential is likely to be slightly higher on some postgraduate courses as a result.

Training/professional development

2.45 Academic staff engaged in the production and delivery of off-campus education are commonly self-taught. With the advent of VLEs, institutions are introducing an increasing amount of formal support from pedagogic experts, as well as training in both technical areas (such as html and template production) and in the assessment and teaching techniques required for teaching at a distance. Staff need to communicate in new ways, and in particular to identify those who are failing and to have a dialogue at a distance with them in a way that will improve matters. The development costs for an institution can be significant where major pedagogical change such as this (coupled perhaps with challenging technical processes) is being taken forward.

2.46 The University of Glamorgan, in its Enterprise College Wales initiative of web-based delivery with local face-to-face support found that:

Staff development has proved challenging for all aspects of the programme. Many different skills need to be cultivated for a successful project of this kind. There may be superficial similarity to traditional techniques, but in practice requirements have often proved substantially different. This is true in areas as simple as writing content, screen design, language control, setting assessments, online moderating, video conferencing and technical support. There is also a real shift in role away from teaching per se towards being a learning manager – a member of a delivery and support team – that has a contract to the learner to provide response to queries more rapidly, and at other times of the day and year, than normal.⁷

2.47 Notwithstanding the importance of staff development, we considered that this could be considered as one part of each academic's professional development portfolio. It is not separately taken into account in our cost model.

Transferability of costs

2.48 In this study we are costing the time and resource input of the HEI. We have not taken into account student learning hours. On e-learning and distance learning, student learning hours might be the same, but they may be predominantly self-taught, using the materials and other support provided. There is a switch from scheduled (class contact) to unscheduled (student learning) time. The latter is not reflected in the costings. Neither have we taken the costs of student IT hardware, software and communications, learning environment, and printing and copying costs into account. All of these are now provided by the student, rather than by the HEI.

⁷ Cooper, A. (2002) *Barriers, Borders and Brands: Forging an Institutional Strategy for Development and Collaboration in Borderless Higher Education*, in "The Observatory on Borderless Higher Education", London, May 2002

2.49 Employer costs are also affected. E-learning and distance learning can possibly remove some of the time required for day release, and productivity can theoretically be maintained through training. In practice, students will need the same amount of time for learning, and many might anyway have been undertaking conventional part-time evening study. We have not included the productivity regained through study now transferred to “student” time, rather than “employee” time.

In summary

2.50 We identified above that off-campus modes, in particular e-learning and distance learning, can be more costly than conventional provision because of more time required on:

- learning support and guidance (delivery, pastoral support);
- preparation;
- assessment;
- administration and management.

2.51 Offsetting this we note that:

- preparation time can be offset by increased cohort sizes;
- pedagogy is at early stages of research and understanding, and it is not clear how much learning guidance and support is really required;
- some estates and some central services costs are less for off-campus provision.

We explore these, with examples, in the appendices.

2.52 However, the findings from this report should be understood in the context that the development and presentation of courses for most of these modes of delivery is not on a large-scale, “business” model of delivery:

In most institutions, developments (in “borderless higher education”) are still managed on an ad hoc basis with individual faculties, schools or even single academics themselves taking the initiative and working to their own agendas. In doing so, work has tended to progress within process frameworks established for traditional forms of delivery and which may no longer be appropriate for new pedagogical models. ...

It is also the case that many universities do not possess the critical mass to provide the resources needed to embark on major initiatives alone, and be financially strong enough to risk resources for innovation.⁸

⁸ ibid

Annex A

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Abbreviations

APEL	Accreditation of prior experiential learning
Band	Bands B, C and D are based on HEFCE price groups (as described in HEFCE 2003/29 'Funding higher education in England')
FEC	Further education college
FTE	Full-time equivalent
HEI	Higher education institution
LSC	Learning & Skills Council
OU	Open University
VLE	Virtual learning environment