Appendix A: Terms of reference and definitions

Terms of reference

Our remit was to:

a. Outline the general policy arguments for and against utilising a cost-based approach to inform a teaching funding method.

b. Consider to what extent a cost-based approach could and should be used by HEFCE to:
   - identify and reflect the actual costs of those features of HE teaching provision that may warrant differential funding within the TFM
   - identify the overall costs of sustainable teaching across the HE system
   - identify the overall costs of sustainable teaching for individual institutions.

c. Consider the practical requirements and implications of any proposed uses of a cost-based approach.

Definitions and terms

In general, we have used the normal accepted definitions of costing terms, and the HEFCE definitions of factors such as part-time and long course. There is a useful Annex (6) in the TRAC guidance which provides definitions, and we have not repeated that here. However, the following are particularly relevant to this report.

Core or standard provision: The normal good quality UK higher education student experience. It includes a range of 'normal' variations reflecting the diversity of students and institutions, and so includes elements of WP, scholarship, research-led teaching, innovation in methods, etc as would be expected by students. It excludes any exceptional variations or specific projects which might be recognised and funded separately from 'core' provision.

Costs: Unless otherwise specified, costs are intended to be understood in the sense of the TRAC full Economic Costs i.e. the real long-run costs for an institution of delivering any particular activity on a sustainable basis. They can be derived from actual, planned, or zero-based estimates:

Actual: Actual costs for the year just completed, or being completed.

Planned: Either actual costs amended in specified ways for commitments or planned spending ('modified actuals'); or estimated future costs.

Zero-based: A cost built up by evaluating all the activities and elements required to meet the objectives *ab initio* – i.e. without necessarily including constraints that affect the current provision. The cost could be above or below the equivalent actual spending incurred by institutions.

Appendix B: Cost drivers and factors not costed

This appendix includes:

a. A table of all the cost drivers that we have considered (Table 3 below).

b. A description and explanation in respect of the main cost drivers which we are not recommending for inclusion in the new national framework for costing.

Table 3: The main cost drivers in higher education

Discipline
(incorporating performing arts)
High cost base
high costs outside institutional control (e.g. old and historic buildings)
size (i.e. small institutions)
Breadth of provision
subjects of strategic importance, but with low student demand (vulnerable)
other subjects with low demand
Funding available
(e.g. from relatively high market prices or surpluses in other areas of the department including to Non-Publicly Funded Teaching)
Volume of teaching
long periods (long course)
short periods (part-time)
Diversity of student population
Widening participation as defined by HEFCE
Widening participation as defined by institution
other students needing extra help
or less help
Flexible modes of delivery (pedagogy)
high-cost
non-standard e-learning, distance learning
workplace learning (WPL)
evening on-campus delivery
off-campus teaching
foundation degree
sandwich
franchised
partnership
other (institution or academic choice of pedagogy)
Projects/initiatives
Level of the course
Postgraduate/Undergraduate, sub-degree
Year of programme
Complexity
Value for money
(e.g. planning and managing costs to reflect changes in provision; ensuring outcomes are delivered in most efficient and effective way)
Non-completion
(students not completing)

Factors that are not costed

The proposed costing models in this report do not separately cost the following factors. The reasons for this are that they cannot be defined tightly enough for costing, or they do not systematically drive costs, or they can be better costed through another cost driver.

Where these factors do impact on costs, this impact will be subsumed into the other costing models.

Specialist institutions

The institutions that fall under this category of premium funding are those that meet the current criteria of specialist institutions – those that have 60 per cent or more of their courses in one or two subjects only. (Higher costs of other institutions are covered under the small institution premium, or the old and historic buildings premium.)

We note (see chapter 1) that support for specialist institutions is not an explicit HEFCE policy feature. This provides a convenient classification for grouping institutions, but this premium is currently not directly informed by costs, and we do not consider it to be a cost driver in its own right.

We propose instead that the additional costs borne by these institutions are identified through the specific cost drivers that lead to the higher costs in each institution. These are mainly: discipline, and non-standard modes of delivery. (We have not examined every institution currently defined as a specialist institution, and there may be other reasons or cost drivers for their higher costs as well as these two.)

By identifying the appropriate driver(s) behind their costs, the higher cost level incurred by any one of these institutions would then be recognised for funding as a normal part of the funding model – whether within the range of the core costs or as an exceptional variation under model B.

Breadth of provision - minority subjects and other subjects with low demand

Many subjects, or courses, have lower levels of demand than others. This is sometimes true of a subject across the sector as a whole. It can be difficult for institutions to plan to reduce costs in the appropriate department in time to reflect a sudden (or even gradual) reduction in demand – many of their costs are fixed or semi-fixed. This means that the cost base can remain the same, even though the student numbers are declining. The cost per student being taught therefore increases. Unless funding recognises this, institutions will often consider shutting the course or department down, to reduce their losses. Chemistry has been a publicised example of this.

Where the subjects are strategically important and vulnerable[1], HEFCE has an interest in ensuring there is sufficient capacity across the sector. This could be cost-informed, and we cover this under cost model 6 (specific initiatives). This is despite

[1] See, for example, 'Strategically important and vulnerable subjects', final report of the advisory group (the Roberts report), HEFCE 2005/24.

the fact that the losses of a particular department may not be of significance across the institution as a whole (or are only of significance when considered alongside their position on Research or Other activities).

However, where HEFCE has not identified the subjects to be of strategic importance and vulnerable (threatening the capacity of the sector as a whole), then we propose that the subjects are not costed. We understand that minority subject funding is unlikely to continue. The higher costs are assumed to affect all institutions equally, or are not significant in terms of institutional sustainability, and therefore can be subsumed into core costs (indirectly recognised through higher discipline costs).

Funding available

Where HEFCE-fundable programmes are receiving higher levels of income than others in the same price group, then the costs are generally higher. An obvious example of this is MBA programmes, which often receive significantly higher fees from participating students (and fees that are higher than HEFCE's assumed fee in the current TFM). In other cases there are surpluses from Other or NPF student activity which can be used to subsidise HEFCE-fundable Teaching. Other examples might include Research-intensive departments – here it is not the funding that is available so much as the lower-cost teaching staff (graduate assistants such as PGR students; or Research Assistants) and the equipment and other facilities that are funded by research sponsors but which at the end of their research life are available for Teaching. In fact, departments that receive a lot of money from Research may support Teaching in these ways, but as Research is in such significant deficit it can be a drain on a department's overall resources (depending on the internal resource allocation model).

Of course the current level of funding may be less. At the moment the funding model assumes a certain level of average income for PG and PT students – and some students will be asked to pay less (the assumed fee is informed by average actual fees). Fees for FT students will now change with the introduction of variable fees, even more if the cap is lifted, and it is possible that the fee assumed by HEFCE in its TFM may be higher than the actual fee charged by some institutions.

We suggest that these issues are dealt with through the funding allocation, not by studying the impact on costs and reflecting this in student or discipline weightings. However, the impact on costs might become clearer as a result of the benchmarking/value for money reviews proposed under cost model 1 (disciplines).

Type of students, other than WP, accessing additional support

WP students receiving or needing additional support are considered by HEFCE and OFFA to be institutionally defined. We propose a cost model (2, widening participation) that uses this definition.

This is a different definition from the student population that is recognised in the funding model (using characteristics that include postcode and educational attainment). This theoretical 'WP student population' as defined by HEFCE is in effect a proxy – a practical and fair way of allocating the additional funding, and one that reflects government policy. It is not practical to establish only the costs of these HEFCE-defined WP students, as institutions do not keep records of their costs in that way. It would be bureaucratic and complex to require them to do so. It would still not

be right as HEFCE's WP student numbers are weighted according to various parameters (such as postcode) which may have little impact on the different resource levels they need to access.

In practice some institutions provide all students with the extra support provided for WP students, as it becomes an embedded part of their provision. Where practical to do so, these costs would be excluded from the costs of WP provision.

Flexible modes of delivery, other than specific types of course as defined by HEFCE

Some HEFCE-defined types of provision are funded separately because:

a. They are significantly higher cost than standard forms of delivery.
b. They are provided to target groups of particular interest for HEFCE policy, such as WP students.
c. They can be defined.

Examples of non-standard modes of delivery currently funded separately are foundation degrees, and sandwich courses.

Some high-cost modes of delivery are used to an exceptional extent by some institutions across a significant portion of their courses – for example, small group teaching in Oxbridge, evening delivery in Birkbeck, distance learning at the Open University, and delivery in Cranfield.

All of the above are covered under cost model 3 (non-standard course costing).

Modes that are difficult to cost

Other non-standard modes of delivery are of equal policy interest, but are more difficult to define, and can be relatively few in number. These include AP(E)L, e-learning, distance-learning, off-campus/local teaching (such as work-based learning), and evening delivery.

There is a significant challenge with definitions in these areas. It is only possible robustly to cost something that can be defined fairly precisely.

The quantum of much of this non-standard delivery was identified in a recent costing study[2]. That study found that there is relatively little 'pure' delivery of this kind ('pure' was defined as >50 per cent of a course being delivered this way) and it is frequently only provided for PG programmes (as fees can be charged to offset the higher costs). There is, by contrast, a considerable amount of blended learning which incorporates this provision but only as part of a course being provided in a standard mode.

The little 'pure' non-standard delivery that there is, is often organised on a localised basis by a single academic – and it is not necessarily efficient or good practice in terms of resource use or delivery. Many costs are hidden – such as academics preparing materials or supporting students in their own time.

[2] 'The costs of alternative modes of delivery', JM Consulting Ltd for HEFCE, August 2003. www.hefce.ac.uk/pubs/rdreports/2003/

Delivery methods are often influenced strongly by the funding available (for example, Department of Health funding for innovative delivery, problem-based learning in medical schools, and niche markets for overseas students).

Many of the costs associated with non-standard delivery relate to programme set-up, and are not incurred at the time that students are taught. There can be significant infrastructure costs (such as those for embedded e-learning systems).

In general, in non-standard modes:

a. There is a wide range of methods of delivery within each mode (e-learning for example can be provided through sophisticated packages, with efficient administrative support, and capped tutorial entitlements – or not).

b. Volumes (of programmes taught by a mode, or by a particular method within a mode) are too small to provide robust data.

c. Definitions of each mode are very difficult, and changing rapidly as technology and practice develops.

d. Costs are not robust enough to use. There is very little cost information – and most of the direct costs of Teaching (delivery or contact time) are replaced by indirect costs of Teaching (materials preparation, administration, tutorial support) where there are few records of time spent or required.

We note that some of the costs of non-standard modes of delivery can be recognised through the discipline-costing model. This would occur where non-standard modes are more prevalent in some disciplines than others (such as off-campus work during geography fieldwork modules or small group work in laboratory teaching). Others would be identified through special initiatives (such as problem-based learning groups in medical schools).

However, for most of these, the four factors outlined above mean that it is difficult to use a costing model to inform their funding. These are different from the non-standard activity of WP because WP activities appear on a much larger scale. The costing problems (of small volumes, definitions, multiple methods of delivery) can potentially be overcome based on large samples of activities/institutions.

If HEFCE wishes the funding model to encourage non-standard modes of provision, and to recognise the related costs, options may include:

a. Moving funding method from formulaic (cost-based) to strategic initiative (bidding for innovation).

b. Assuming some extra costs in the threshold (and expect this provision).

c. Reflecting some extra costs in discipline characteristics (allowing change over time).

d. Reflecting some exceptional levels of provision in a few institutions.

e. Reflecting some in WP (such as additional costs of franchising to FE over normal delivery).

The non-standard provision that is not costed specifically could either be subsumed into the consistent core costs, or could be funded through some sort of bidding/plan – that is specific projects/initiatives funding.

But individual institutions may be interested in costing individual courses of different types for their own purposes. It would be helpful to those institutions if they could use a standard course costing model – we describe such a model under cost model 3.

Franchised provision and sub-contracting

In sub-contractual relationships involving FECs teaching HEI registered students, the cost to HEIs (of the FEC effort) is in effect the funding that they have transferred to their partner FECs. These costs are different from the actual costs incurred by FECs, and there is little information on this in HEIs[3].

However, HEFCE is arguably more interested in the costs that HEIs are incurring, not the full economic cost of 'fair' partnership arrangements.

Partnership arrangements

There are many examples of the development and provision of courses in collaboration with partners

- franchising (here defined as an FEC delivering the teaching to an HEI's registered students)
- progression (FE to HE after Year 0)
- joint delivery of a programme, or even modules within a programme (e.g. in a foundation degree)
- employers' participation in providing/supporting students/workplace learning opportunities
- industry participation in teaching/case studies
- NHS (knock for knock)
- NHS (placements)
- Oxbridge colleges (shared teaching)
- inter-institutional collaboration (shared services)
- academic collaboration
- HEFCE-recognised funding consortia (distribution of grant through a single lead institution, with delivery by individual consortia members).

There is generally an extra cost of partnership (involving more than one institution/body in any activity immediately adds to cost). The costs of some partnerships are specifically funded (the Department of Health makes payments to HEIs to support partnerships in social work education, for example). But sometimes

[3] A study carried out in 1998 found that there are significant variations in funding received by FECs (and therefore 'FEC costs' borne by HEIs). This is a particular consequence of the fee levels in operation at the commencement of the scheme. It also found, at that time, that there was little costing of these courses in either FECs or HEIs. It was not possible to state whether marginal or full costs are being covered in the FECs; or whether HEI costs are being covered by their administrative charges. The study suggested that it would be good practice for both parties to undertaken a cost/benefit analysis of their franchise-type schemes. 'The Nature of Higher and Further Education Sub-contractual Partnerships': University of Leeds, JM Consulting Ltd, University of Surrey and the Further Education Development Agency (FEDA, now the Learning and Skills Development Agency, report to HEFCE, June 1998.

the additional costs can be absorbed or shared with partners (such as in franchising income-sharing arrangements) or cannot be separately identified because of the complexity of the arrangements (such as knock for knock).

We see no reason, in principle, why HEFCE would want to fund separately the full costs of these kinds of arrangements, although it may want to encourage/reward participation in them. Collaborations and partnerships could be funded:

- as part of the recognition of additional costs of non-standard modes of delivery, e.g. foundation degrees
- as part of the consistent core (expectation of collaboration/partnership for good quality teaching); and more specifically, in the discipline weightings (medical knock for knock);
- as part of strategic innovation funding (bidding) for example, the Lifelong Learning Networks specifically cover partnership arrangements.

However, it is good practice for institutions to understand the costs that they incur in these areas. Cost models 3 (non-standard course costing) and 6 (specific initiatives) include prompts to ensure that the additional costs of any partnerships are considered and included.

Level; postgraduate, undergraduate or sub-degree

These levels can be defined through the nomenclature introduced by the Quality Assurance Agency (QAA) – e.g. C, I, M, H. Records of qualifications are made in HESA. Generally a postgraduate taught (PGT) year of study is 180 credits, compared to an undergraduate (UG) year of 120 credits.

A study carried out for HEFCE in December 1999 by JM Consulting ('Study of comparative costs of first degree and sub-degree provision') reviewed the costs of different levels of programmes – this included a small sample of taught masters courses. This study found that while there are variations in cost, there is no systematic difference at a level which is material for policy purposes between sub-degree and degree in the sample of institutions studied.

This study included a small number of postgraduate (PG) courses in its sample. We are not aware of any study that has focussed specifically on PG versus UG costs. However, this has been reviewed tangentially in several costing studies, and there is no consistent evidence that the costs of a programme of similar length (in terms of weeks of study, for example) but which are at a different level of study have higher costs. Many PG courses are significantly taught. Others may include a large dissertation (requiring more costly one:one supervision and support – but many UG programmes are also assessed through dissertation in their final year). PG students are often independent learners, and need less support than Year 3 students, due to their maturity or motivation (such as the courses being directly relevant to their current employment). Many PG programmes draw heavily on Year 3 modules.

The current funding model uses a long course premium to take into account any additional costs for PG provision that arise through a longer period of study in a year. (Refer to cost model 3, non-standard course cost model.) We consider the costs of long courses under the non-standard course cost model. It would be inappropriate for any additional costs of PG provision to be recognised both in a long course factor and in a PGT factor.

For the reasons given above we are not proposing that levels of study are costed separately. The average cost of a student would cover all levels of study.

Specific courses can be studied to see whether they show systematic differences in cost levels from other courses. For example, foundation degrees currently receive premium funding, in part informed by a costing study carried out in 2003 ('Costs of alternative modes of delivery', ibid). We also understand that there is interest by some institutions in recognising additional costs of the final year of an MEng programme (a four-year programme). This was looked at in the 1999 Comparative costs report (albeit through a very small sample). That study found the programmes included a wide range of modes of study (which would impact on relative costs) and reported that overall: 'We did not find any factors that would necessarily lead to systematic differences in costs over Y3'[4]. The non-standard course cost model 3 described in the main body of this report provides a means of assessing these differentials if HEFCE and institutions consider it appropriate.

Year of programme

The 1999 study of 'Comparative costs of first degree and sub-degree provision also compared the costs of different years of a course. This study found that the concept of looking at different years of a course is of limited validity and the notion of 'level' does not provide a robust alternative. This is particularly due to unitisation (modular or credit systems have extensive ranges of options and elections, spanning year groups).

In addition, the term level (i.e. Year) 1 to 3 is not consistently used – many institutions classify their modules as Part I and Part II instead (with the latter covering both Years 2 and 3).

Even if the concept of a 'year' was more stable (and so could be costed) the wide range of teaching methods employed by academics means that there is little consistency between courses taken even within the same discipline and year. It becomes very difficult to identify systematic variations with another year (although with a large enough sample size, this is possible). But the variations mean that any average cost differential between years will actually apply to only part of any institution's provision. The differentials are extremely sensitive to the particular circumstances of each module in each year – such as the extent to which modules are shared between disciplines; the types of assessment; the choice of pathways and/or options in a department; the number and size of seminar groups.

HEIs also felt that a student's learning should be planned on a student lifetime basis ('investment' and 'progression across a continuum of learning' were concepts used). They felt that a funding method that focussed on years would be fossilising old or inappropriate concepts of study 'one year at a time' rather than encouraging WP concepts of 'dropping in and out', student-focussed learning, and treating the student programme as an integrated whole. One institution remarked: "…funding Y3 differentially is conceptually irrelevant … we deal with programmes as a whole".

The 1999 study found that while there are variations in cost, there is no systematic difference at a course level which is material for policy purposes between years of provision in the sample of institutions studied.

[4] P48 of the 2003 report.

Complexity

There is a cost of complexity – courses with complex partnership arrangements, or that involve multiple modes of delivery, or with students from a wide variety of backgrounds, will all have higher costs than less complex courses. However, the costs of this complexity will be part of the costs of those other factors, and should not be costed separately.

Value for money

Inefficiency affects cost levels, but there is poor understanding of this in the sector. It is early days in robust costing throughout much of HE, but TRAC has provided a strong basis for this, and any new focus on the costs of Teaching will allow a better understanding of inefficiency (how it can be identified, what is causing it).

Value for money issues can be dealt with:

- through the benchmarking of costs, accompanied by a critical analysis and review, which we cover under cost model 1 (disciplines)
- by rationing funding.

We suggest that none of the factors listed above are costed as part of a consistent national programme. This means that the high-costs arising from them would be left in HEFCE-fundable Teaching, and will help drive or inform the formulaic funding.

However, the costs of partnerships, complexity, and value for money would be identified where possible in all costing models.