

FURTHER AND HIGHER EDUCATION NEWSLETTER

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Introduction

Welcome to the eighth newsletter for finance practitioners and CIPFA members working in the further and higher education sectors. This newsletter has been prepared by CIPFA's Further and Higher Education Panel. The Panel's members are:

Eric Morgan (Chairman) *Nottingham Trent University*

Kerry Ace *CIPFA*

Richard Allanach *Further Education Funding Council*

John Brown *Newham College of Further Education*

Simon Clark *North Derbyshire Tertiary College*

Andrew Clark *Welsh Funding Councils*

Colin Hubbard *Bolton Institute of Higher Education*

Jo James *National Audit Office*

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Graham Marsden *PricewaterhouseCoopers*

Liam McCabe *The Scottish Funding Council for Further and Higher Education*

Bryan Pearce *London School of Economics and Political Science*

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John Sandbach *University of Liverpool*

Darren Taylor *Bentley Jennison*

Sarah Tilley *Quality Assurance Agency*

Graham Try *Richmond upon Thames College*

John Woodall *University of Essex*

CIPFA Publications

A Resource Quantification Model: A Case Study from the Further and Higher Education Sector

A decrease in the level of public funds made available to colleges and universities together with a number of other factors such as a tendency towards devolved or delegated budgets; requirements for institutions to bid for funds and increasing demands for flexible payment facilities by students have all contributed to increased pressure on finance department staff and their workloads. This case study shows how a large college of higher education carried out a fundamental review of its finance function in order to develop a flexible departmental structure appropriate to its current requirements and devised a methodology to ensure that any bids for additional resources could be transparently justified.

The guide is divided into two parts. Part I describes the background in the college which brought about a need for change. Part II describes the methodology which was developed and how it may be applied in other organisations.

This guide is now available priced £19.50.

Forthcoming Guidance

Mergers and Collaboration – A Guide for Further and Higher Education Institutions

Over recent years there has been significant merger and collaboration activity in the further and higher education sectors. Such activity is likely to increase owing to the changing environment in which further and higher education institutions operate, for example through the impact of the new learning and skills councils.

This practical guide considers the issues surrounding mergers and collaboration and identifies the key principles which will enable further and higher education institutions to plan and execute an effective merger or collaboration.

This guide will be available during December 2000.

Higher Education Finance (fully revised edition)

This revised edition of Higher Education Finance outlines the essential features of the financial structure and funding systems which underpin the higher education sector and details the regulatory framework in which institutions must operate. It is designed to act as a reference manual for those already working in the sector; to provide an insight into the complexities of higher education finance for those with an academic interest in the sector; and to give guidance to those outside who deal with the sector.

The volume includes as appendices the Higher Education Funding Council for England's Audit Code of Practice and Model Financial Memorandum and the new SORP on Accounting in Further and Higher Education Institutions.

This volume will be available early in 2001.

For further details of the above publications, please contact CIPFA's Publications Department on 020 7543 5601.

Forthcoming Courses

Developments in Further and Higher Education Finance – Wednesday, 24 January 2001 (London)

Topics to be covered include:

- corporate governance and risk management
- value for money strategies
- the Transparency Review
- E-business issues
- strategic plans.

For further details contact Alex Aarons on 020 7543 5751.

SORP Update – Accounting for Further and Higher Education

The new Statement of Recommended Accounting Practice (SORP), published in August 2000, is the first to combine the requirements of institutions in the further and higher education sectors. It has been developed from the existing SORP for higher education institutions and the accounting requirements operating for further education institutions.

The original SORP for higher education was produced by a joint CVCP/SCOP/CSCFC working party which was recognised as an 'industry group' by the Accounting Standards Board for the purpose of issuing the SORP. The industry group was broadened to embrace further education representatives for preparing the new SORP.

The principal requirement is for

institutions to comply with Generally Accepted Accounting Practice (GAAP) and the purpose of the SORP is to show how this is to be interpreted or varied for the further and higher education sectors. The new SORP contains explanatory notes and an example set of financial statements (Casterbridge College) to show how the SORP could be implemented. It should be noted that the example financial statements go beyond the requirements of the SORP alone (which relate to the primary statements) and include items such as a corporate governance statement and disclosure of senior staff salaries. The mandatory parts of the financial statements are the formats of the income and expenditure account, balance sheet, cash flow statement and statement of total recognised gains and losses.

The new SORP reflects the changes there have been to GAAP caused by the significant Financial Reporting Standards issued since the original SORP, many of which are directly relevant to the sector. These include:

- (a) FRS – Impairment of fixed assets and goodwill.
- (b) FRS – Provisions, contingent liabilities and contingent assets.
- (c) FRS – Tangible fixed assets.

Deferred capital grants are now included in the funding part of the balance sheet.

The SORP supports the following objectives for users of reports and financial statements for

further/higher education institutions:

- (a) a true and fair view of the financial position of the institution at the balance sheet date and of the income and expenditure and cash flows for the period then ended
- (b) an explanation of how the institution is governed and managed
- (c) a suitable analysis of:
 - (i) the income from all sources within the period of the accounts
 - (ii) the expenditure on all activities within the period of accounts
 - (iii) the assets and liabilities of the institution, classified in suitable form
 - (iv) any known or probable circumstances which might significantly affect the institution's financial position, and
 - (v) how the institution is performed financially, including the adequacy of the working capital, its solvency (or insolvency), and its investment performance.

Each year, BUFDG issues a technical update with revised guidance on application of the SORP to the higher education sector. Through modified versions of the example accounts, this also incorporates

issues from funding councils' accounts directions and perceived good practice from other sources as it develops. Accounts directions and guidance on sector accounting policies for further education institutions are also issued by the further education funding councils.

Survey of Finance Systems

As you may recall, in 1999 CIPFA circulated a questionnaire, developed by its Further and Higher Education Panel, to request some basic information on the finance systems currently in use in further and higher education institutions, together with information on feeder/related systems. The questionnaire provoked considerable interest and the Panel was very pleased with the positive response. The results of the survey were featured on CIPFA's Policy and Technical website. It is the Panel's intention to maintain this information as a service to the sectors and it is now looking to update the survey. Directors of finance are therefore invited to notify CIPFA if they have updated their systems by completing the finance system questionnaire which can be found on the consultation page of CIPFA's Policy and Technical website. CIPFA's website address is www.cipfa.org.uk. If you have sent in details after the publication of the original survey results, your institution will automatically be included in the new survey. Completed questionnaires should be sent to Kerry Ace. Her e-mail address is: kerry.ace@cipfa.org.

Key Features of LSC Funding

This article was provided by Mick Fletcher of FEFA, The views expressed here are Mick's and as such do not necessarily reflect the views of CIPFA's Further and Higher Education Panel members.

The proposals for the new funding system to be operated by the Learning and Skills Council (LSC) are ambitious. They not only plan to bring together the separate arrangements operated by FEFC for colleges, TECs for work based training, and LEAs for adult and community education. They will extend to cover school sixth forms and also the programmes such as New Deal offered by Employment Services (ES). The scope of the exercise means that changes will not all occur on April 1st 2001 when the LSC takes over but will be phased in over two or three years.

There are many features to welcome. The bulk of funding for providers will be based on formulae which reflect the size and intensity of the programmes they offer, much like the FEFC approach. Training providers will benefit from the predictability of standard national rates; FE providers will not be restricted to programmes which lead to a qualification, and will be able to offer units of qualifications. Community and voluntary organisations will be able to be funded directly by the LSC, though they may still opt to take a franchise. All providers should welcome that there will be a 'disadvantage element' though

more work is needed on how it is to be defined.

There are still a number of concerns. The DfEE seems to envisage a sharper distinction at age 19 than most providers would recognise. There are some signs that the LSC may place too much faith in manpower planning, seeking to meet skill shortages. There is an emphasis on competition, which is of concern to both public, voluntary and private providers. It is welcome that the funding papers recognise the need for extra support for some learners though a worry that the proposals focus on learners' disabilities rather than their needs.

More work is needed in a number of areas. The arrangements for learner support across the country are too varied. There also needs to be more consistency in applying common principles across the various sectors. At the moment for example it is proposed that the percentage of funding linked to achievement should be 10% in schools and colleges, 20% for modern apprentices and 30%+ on ES programmes. Nevertheless there are clear signs that the DfEE is taking note of feedback.

A full commentary on the funding paper 'Learning to Succeed 2nd Technical Consultation Paper' and its companion paper 'Funding Flows and Business Processes' can be obtained from FEDA's website at <http://www.feda.ac.uk>

The consultative papers themselves can be obtained from

[http://www.dfee.gov.uk/post 16](http://www.dfee.gov.uk/post16).

Costing in Universities and Colleges of Higher Education

Introduction

In higher education, costing has become an increasingly important issue. The Transparency Review (TR) is a Government initiative, introduced by the current Administration's first Comprehensive Spending Review (CSR). The CSR approved £1.5bn additional research funding for higher education, but the Treasury made the continuation of this funding conditional on the sector becoming more open about how it spends public funds. The Treasury required the funding councils to ensure that universities and colleges of higher education participated in this review.

The funding councils had already established a steering group, the Joint Costing and Pricing Steering Group (JCPSG), to develop methods and policy for the improvement of costing and pricing techniques. The JCPSG is now co-ordinating the Transparency Review.

The key elements of the review will mean that:

- *every university and college of higher education must implement new costing methods which will satisfy the standard in the TR report*
- *implementation is phased over 5 years, with full transparency being achieved using robust methods before the end of 2003/4*
- *the total costs of teaching (T),*

research (R), and other (O) are calculated at institutional level) splitting T and R between publicly funded and non publicly funded activity), using academic department level costs

- institutions must use the department level costs to calculate new and more robust indirect cost rates for T, R and O in different types of academic department (classroom based, laboratory-based and clinical).

The review methodology has been developed with the assistance of selected pilot institutions. The experience of these pilot institutions will be used to influence and inform the rest of the sector.

In July the eight pilot universities provided aggregate cost data to the funding councils under the review and, in August, the JCPSG published the definitive manual for the project, the 'Transparent approach to costing'. The second phase of the review will require all universities and colleges of higher education to report on their 2000-01 data in January 2002.

For further information please see the JCPSG website at www.bris.ac.uk/JCPSG.

Activity-Based Costing in Universities – Five Years On

Paul Cropper and Roger Cook

The following article describes the current state of costing within the higher education sector, reviewing recent published literature and analysing the progress made by institutions in implementing activity-based costing (ABC). It draws on the

findings of two cross-sectional surveys of all UK universities, undertaken in 1993 and 1998/99. The data collected suggests that while implementation of ABC systems has been slow, this might be about to change because of pressures being exerted by funding bodies and central government.

In the recently published *Costing Guidelines for Higher Education Institutions* (Higher Education Funding Council [HEFC], 1997, p. 5), Professor David Westbury writes 'Sound costing information to underpin decision-making in higher education institutions is vital, particularly as financial constraints become tighter'. In other words, gone are the days when academics can look out from their ivory towers without fear of the consequences of pursuing uneconomic ventures or ill-considered initiatives.

Institutions must now balance the books (O'Leary, 1999). The financial crises at Cardiff University in the 1980s and at Edinburgh and Lancaster in the 1990s (Shattock, 1988; Cornish, 1994) are all too real and emphasise the need for institutions to demonstrate 'cost recovery and net operating surplus or deficit on all courses and activities' if they are to adequately manage public funds (National Audit Office [NAO], 1998). Institutions have to ensure that commercial reality plays a part in their decision-making processes. That is not to say that loss-making ventures cannot be undertaken in any circumstances. It merely provides that all concerned are aware of those losses, the reasons for them and the actions required to sustain them.

The effectiveness of cost and management accounting systems within universities was considered by Cropper and Drury (1996) in a cross-sectional survey of all institutions in the UK during the mid-1990s. The data obtained from that survey emphasised the range and complexity of methods employed by universities to ensure their continued solvency. Clearly some institutions have been more successful than others in achieving this goal.

Given the current state of interest in costing throughout the sector, and the recent calls for a greater degree of transparency in deriving the cost of teaching and research in particular (Taylor, 1999), it is appropriate to update those survey results. The purpose of this article is to analyse the data derived from a second national survey and to compare and contrast it with the information obtained five years earlier.

Background

The resurgence of interest in costing within education institutions can be traced back over the past 15 years. The reports from Jarratt (1985), Hanham (1988) and the NAO (1994) emphasised the need for strong financial management within universities through improvements in planning, monitoring and resource allocation, thereby necessitating the introduction of more sophisticated costing, management accounting and committee systems.

In 1988, the Chartered Institute of Public Finance and Accountancy (CIPFA) devised the first practical manual of guidance for the provision of financial information systems within colleges. The manual offered advice on course costing at a detailed level using a matrix framework to apportion costs between faculties, programme areas and departments. Unfortunately, no records of the number or type of colleges adopting the recommendations have been kept by CIPFA and it appears that, at best, only a handful of establishments ever chose to follow the guidelines.

Shortly after this, the Chartered Institute of Management Accountants (CIMA) also decided to tackle the issue by hosting a conference called Management Accounting in Universities. In his keynote speech at this conference, Sir Ron Dearing stressed his concern for the quality of higher education and the need for improved financial information systems. Sir Ron concluded that successful management accounting methods lay at the heart of achieving enhanced quality and effectiveness.

But even before the publication of these reports, the subject had been of interest to both academics and practitioners within the sector through the 20th century, as evidenced by the work of Stevens and Elliott (1925); the National Committee on Standard Reports for Institutions of Higher Education (1935); Blau (1955); Evans and

Hicks (1962); Witmer (1972) and Fielden and Lockwood (1973). The common theme has been how to improve decision-making and do more with less by identifying where resources could be better employed. Perhaps unsurprisingly, this theme re-occurs more frequently during periods of funding shortages and efficiency drives by central government.

Despite all this interest, costing initiatives within higher education institutions have met with only limited success. The reasons for this can be explained by considering two primary factors associated with costing models in the sector; one internal and one external:

- First, insufficient attention has been paid to the allocation of staff time to activities, with a proliferation of methods ranging from the limited use of time sheets to arbitrary percentage apportionments based on the analysis of individual diaries. Their resulting cost outputs have often been poor because of a lack of success in deriving an effective method of allocation that can be universally applied.
- Second, institutions have been unable or unwilling to persuade their customers to pay for an equitable proportion of the indirect costs of the products they sell (Committee of Vice-Chancellors and Principals, 1998). If research councils are unwilling to pay more than 40% (now 46%) of university overhead costs when distributing research funding, then private sector organizations are hardly

encouraged to pay the full overhead costs of commercial activities.

Indeed, the latter point raises the question 'Why devise accurate costing systems?' if they cannot be used to justify the selling price. It is an indictment of such problems that overheads as a proportion of direct costs have in the past ranged from 16% to 120%, with little consistency between institutions.

While most would agree that it is possible to obtain an approximation of the resources consumed by various areas of expenditure, such as accommodation, equipment, consumables, library and computing, the main difficulty lies in the division of academic staff costs between different activities. Adopting a process of collecting, storing and analysing time records would require further development of information systems at most institutions. The decision to introduce a more sophisticated time recording method must therefore be made on the basis of informed cost/benefit criteria.

The benefits might include more accurate information for forecasting, performance measurement and decision-making (for example pricing decisions), but the system would need to be designed, monitored and maintained, all of which requires additional effort. Furthermore, the concerns of the staff and the psychological costs of introducing the system need to be considered. Put simply, staff may well resent the burden of time recording mechanisms for checking the use of their time when, in the past, they have operated under the status of

'self-validating' professionals. Moreover, they may not be in a position to state accurately how much of their time is spent on teaching and research. The two areas are not always distinct and separable.

In order to address some of these difficulties, the higher education funding councils have introduced costing guidelines. Their primary aim is to ensure a consistent methodology for deriving and reporting costs across the sector without imposing a rigid standard to be followed by all institutions. Although the guidelines fall short of actually recommending an activity-based management approach, they do call for an analysis based on defining cost objectives (i.e. grouping costs by function, sub-division, contract, etc.), cost drivers, activities and outputs within a structured framework. They clearly point towards activity-based techniques. The process can be divided into six key stages as shown in figure 1.

- Figure 1 The costing process**
- Identify the resource costs (staff, consumables, equipment etc)
 - Identify the products (courses, research papers, consultancy, catering etc)
 - Identify the activities (course delivery, research, admissions, library services etc)
 - Assign resource costs to activities
 - Link the activities to the products using cost drivers (staff, students, space)
 - Analyse and report the results.

Figure 2 Academic department model

<i>Resource</i>	<i>Activities</i>	<i>Outputs</i>
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<i>costs</i>		
Academic staff	Teaching Research	Courses or modules
Research assistants	Scholarly activity	Publications
Technicians	Consultancy	Projects
Administrative staff	Faculty administrative	Reports
Supplies and services	on Statutory	Other
Equipment	compliance	

To illustrate how the process works in practice, figure 2 gives an example of the typical direct resources, activities and outputs for an academic department. Resource costs would be assigned to activities and to outputs on the basis of either direct attribution or some method of apportionment using cost drivers such as student numbers, staff employed or space occupied. The indirect costs of an institution, including student services, general administration and premises, would be apportioned arbitrarily.

This approach recognizes that not all overhead resources are consumed in proportion to the number of outputs produced and is similar to ABC methods used in the manufacturing sector. Indeed, an analogy can be drawn with the classification of activities according to a hierarchy first described by Cooper (1990) and shown in figure 3.

Figure 3 Hierarchical classification of activities

<i>Type of activity</i>	<i>Definition</i>	<i>University activity</i>
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Unit level	Activities performed each time a product is delivered, for example a module	Teaching and research
Batch level	Activities performed each time a batch of products is delivered, for example a portfolio of modules	Course committees, assessment and validation events
Product level	Activities which are needed to support the provision of each type of output	Faculty administration
Facility level	Activities which sustain an organisation's ability to function	General administration and provision of premises

Each major activity is identified and classified according to how it fits within one of the four categories of activity. Costs that fall into one of the first three categories (i.e. unit-level, batch-level and product-level) will be assigned to products according to the appropriate cost driver that best describes the underlying behaviour of that cost. However, the cost of facility-level activities can only be apportioned in some arbitrary way.

The idea of using activity-based costing (ABC) in education institutions is not new. One of the earliest publications on ABC in the higher education sector came from Port and Burke (1989). They noted that institutions were effectively in the position of being a supplier of a range of products which have to be sold in a competitive market. If prices are set too high there is a risk

that sales will be lost to a competitor. But if the price is too low there is a danger that losses will be incurred. The argument is that attaching a cost to an activity raises the awareness of users as to the price and value of that activity, thus allowing priorities to be set between research, teaching and other income generating initiatives in the pursuit of competitive advantage (Groves *et al.*, 1997). Although ABC began as a unit product cost technique it has quickly developed into a cost management technique.

More recently, researchers have provided case study evidence for the use of ABC within universities, both in the UK and the US (Groves *et al.*, 1994; Acton and Cotton, 1997; Goddard and Ooi, 1998). Such papers describe how ABC techniques have been applied and the benefits that accrue to the individual institution. But perhaps the most intriguing research on the subject comes from cross-sectional surveys which provide an indication of just how widespread the use of ABC is among universities (Cropper and Drury, 1996; Mitchell, 1996; Newton, 1997).

However, these studies only provide a snap-shot at a single point in time: none looks at the trend in the use of ABC over a period of several years. To remedy this, the following results have been obtained from a survey of university finance officers in autumn/winter 1998/99. The survey had similar characteristics to that undertaken five years earlier by Cropper and Drury in autumn 1993, thus allowing direct comparisons to be made between two sets of data over an extended time period.

Survey Evidence — ABC Trends in the Higher Education Sector

The 1998/99 cross-sectional survey was conducted with the intention of assessing whether any significant progress had been made in the implementation of ABC in universities over the five year period. Questionnaires were e-mailed to the 111 members of the British Universities Finance Directors Group, with useable responses received from 47% of institutions. While the response rate was lower than that achieved in the first survey (63%), many respondents provided a full and comprehensive analysis of their costing methods. The results were sufficient to provide an adequate comparison between institutions, particularly as a similar mix of size and type of university replied to both surveys.

The most significant finding was that over 83% of institutions were currently dissatisfied with their costing systems and were looking to alter them in some way. This is a far higher percentage than was found in the first survey and reflects the underlying changes taking place in the higher education sector. (In 1993, only 17% of institutions planned to change their costing systems in the immediate future.)

However, even in 1993, a significant proportion of institutions (38%) recognized costing as an area of management accounting which required further attention. Issues considered to be of far less importance included budgetary control (17%), management

reporting (15%), resource allocation models (7%), performance measures (7%) and capital investment appraisal (2%). Nevertheless, many of these have attracted more attention over the last five years than costing. This is now changing, with ABC viewed as a possible way forward. The extent to which ABC is used by institutions is analysed in table 1 using comparative figures for 1993 and 1998.

Table 1 Comparisons of ABC in universities

	1998 %	1993 %
Discussions have not taken place regarding the introduction of ABC	31	65
A decision has been taken not to introduce ABC	7	3
Some consideration is being given to the introduction of ABC	38	19
It is intended to introduce ABC	16	5
ABC has been introduced	9	8

The comparison provides compelling evidence of a shift towards greater discussion of ABC within the sector but a take-up rate that is somewhat less than might have been expected given the proclaimed benefits of activity-based techniques and the need for higher education institutions to develop further their costing systems.

Failure to Discuss ABC

The percentage of institutions which had failed to undertake any discussion on ABC techniques fell significantly from 65% to 31% between 1993 and 1998. This was not unexpected given

that costing has taken on a higher priority now that the funding councils have issued costing guidelines and offered incentives, in the form of *ad hoc* cash grants of up to £25,000, to facilitate the introduction of better costing systems in institutions (HEFCE, 1998).

However, there is perhaps a more important issue underlying this trend than the mere provision of funding for start-up costs. The consequences for an institution which decides not to review its costing methods are unclear, but it is not too far removed from reality to expect an institution's future funding to be influenced by how well it manages its current resources. The introduction of more sophisticated costing methods should enhance the decision-making process and thus enable an institution to demonstrate that it is achieving value for money. Of those who had decided not to consider ABC, most had either identified other priorities (46%) and had therefore not proceeded to enter into discussions, or viewed it as simply another arbitrary allocation method (23%), or were reluctant to move away from the costing methods they already used (15%). Other reasons for non-discussion included staff shortages and lack of evidence of any tangible benefits to be gained from introducing ABC. However, many of the institutions which had identified other priorities requiring their immediate attention said that discussions would commence in the near future.

Rejection of ABC

The percentage rejecting ABC showed a slight increase from 3% to

7%, reflecting some disillusionment with the ability of this particular costing technique to satisfy their needs. However, it is hard to be critical of such institutions when it has yet to be categorically proven in the private sector that ABC helps to improve corporate profitability. Although the arguments put forward for activity-based techniques appear convincing, theoretical efficiencies are not always achieved in practice. Its impact in areas such as cost reduction and managerial decision-making processes has yet to be fully explored over an extended time period. Indeed, long-term cost effectiveness has tended to come from optimizing the way an organization operates, at all levels, rather than simply introducing new financial systems.

Reasons for higher education institutions rejecting ABC largely conformed to the standard theory found in textbooks, ie difficulty in finding time/resources or appropriate staff (38%) and problems of gaining senior staff commitment (23%). Only two institutions felt that deriving an appropriate set of cost drivers was an insurmountable problem, or that the data available for incorporation within an ABC model was simply not adequate. Some confessed to a lack of understanding of the technique and how it might be usefully applied. But only one institution felt this lack of knowledge to be so fundamental as to result in rejection without further consideration.

It was noticeable that no institution rejected ABC on the basis that it was technically flawed or that it could

not be used as an effective decision aid within a university environment. The difficulties identified tended to be cultural rather than technical, but had the potential to render ABC ineffective as a decision aid in extreme circumstances.

Some Consideration Given to its Introduction

As the number of institutions choosing to ignore ABC had fallen over the last five years it was not surprising to find a rise in the numbers who were giving some consideration to its introduction. Of those who said they had considered introducing ABC most expected to achieve either an improved awareness and understanding of their costs or a model capable of aiding the decision-making process, as shown in table 2.

Table 2 Benefits expected from an ABC System in 1998

	<i>No of respondents</i>	<i>%</i>
Improved awareness/understanding of costs	26	27
Aid decision-making	25	26
More equitable resource allocation to schools and departments	16	17
Central services more accountable	15	16
Satisfy the requirements of the funding councils	9	9
Other benefits	5	5

Despite the fact that the higher education funding councils are keen for institutions to adopt a more structured and uniform approach to

their costing methods, very few respondents saw this as the primary reason for improving their costing systems. Of the nine institutions who expressed the view that satisfying the requirements of the funding councils was a benefit, none saw this as the primary advantage to be gained from revising their costing systems.

Interestingly, the benefits expected or hoped for were those that were most likely to be achieved in practice by those who had introduced an ABC model (table 3). The majority of institutions had indeed raised cost awareness and understanding or improved their decision-making processes based on the new information obtained. However, only a small percentage of institutions claimed to have achieved cost reductions (one of the major benefits put forward by Cooper and Kaplan, 1991) or a more equitable resource allocation method.

Table 3 Benefits achieved from introducing an ABC system in 1998

	<i>No of respon dents</i>	%
Improved awareness/understanding of costs	5	28
Aid decision-making	5	28
More equitable resource allocation to schools and departments	3	17
Restructuring of schools, departments or activities	3	17
Identification of duplicated non-value added activities	1	6
Cost reduction	1	6

ABC has Been or is Intended to be

Introduced

Few universities have introduced a comprehensive ABC system. Moreover, there has been little increase in usage in the period between 1993 and 1998 despite the greater interest shown in the technique. It is anticipated that this will change in the short term as more institutions move from the position of considering the technique to actually implementing it. But how great this movement will be is difficult to assess. It could be argued that although more institutions have joined in the debate they are merely waiting for something better to come along rather than actively considering the implementation of ABC.

Of those institutions who had introduced ABC, or intended to introduce it, the majority (79%) considered a *comprehensive, university-wide application* to be the most appropriate way forward, with the model being updated on a regular basis. Only a minority intended to use it to cost a few schools/faculties/departments or a limited number of activities such as research or commercial ventures.

By its very nature ABC is a wide-ranging costing application which calls for almost as much effort to be put into costing a limited number of functions or activities as it does to cost the entire organization. It would therefore be surprising if those who used the technique for a limited number of applications did not, at some point, extend it to cover the entire organization. Many of the respondents using it on a limited basis confirmed that this would be the case if expected benefits were realized.

As for the method of introduction, organizations are left with the choice of either using spreadsheets or specialist database software. Higher education institutions who expressed a preference for one or the other appeared to be equally divided as to which was the best approach (see table 4).

Table 4 Method of preparing an ABC model in 1998

	<i>No of respon dents</i>	<i>%</i>
Spreadsheet analysis	12	46
Specialist software from an external provider	12	46
Specialist software written in-house	2	8

Many of those currently using or intending to use spreadsheets also commented that this was likely to be a transitional stage before moving on to using a software package. The reasons for this are two-fold:

- Spreadsheets allow simple models to be constructed which help to establish the parameters for a major costing exercise while allowing managers with little financial knowledge to acquire a grasp of what is to be placed within the model.
- As the model grows, spreadsheets become cumbersome to use, thus necessitating the introduction of some form of database package.

There are a number of activity-based management software packages on the market which provide the power of a relational

database within a structured framework specifically designed for product costing (Tudor and Cavell, 1998). These allow large and complex models to be built and manipulated with relative ease. Of course, the model's complexity is dependent upon the needs of each institution. Organizations with simplistic structures and a limited range of standard products are likely to require a less sophisticated model. If the number of cost drivers is used as a proxy for the complexity of the analysis it can be seen that most institutions intend to keep their models as simple as possible in the first instance. Table 5 shows that institutions have a preference for a limited number of cost drivers.

Table 5 Number of cost drivers used or proposed in 1998

	<i>No of respon dents</i>	<i>%</i>
1-4	8	40
5-9	10	50
10 or more	2	10

There were also clear preferences for particular cost drivers in relation to the cost allocation of certain non-academic services, for example library and registry (student numbers), computing (monitored usage) and estates (floor space), but arriving at a cost driver for central administration proved more difficult with no clear preference emerging in either the 1993 or the 1998 survey: student numbers, staff numbers and staffing expenditure were all considered to be possibilities. However, a number of respondents made the point that no particular cost driver was

appropriate in all circumstances. The general view was that it was more important to derive a few robust and defensible drivers rather than use numerous ones which increase the complexity of the model without significantly affecting the accuracy of cost allocations.

Conclusions

ABC is, in principle, applicable to all educational institutions, although there is a recognition that it represents a significant change from a variable but, in general, fairly basic existing range of costing systems. The major implication of this point lies in the high level of commitment, training, communication, data collection, processing and interpretative work required to introduce ABC and the consequent need for resources and funding which its development will create. This could explain why this survey found that only 9% of respondents had introduced ABC within their institutions.

Empirical evidence exists to suggest that organizations in all sectors have tended to be very timid in introducing ABC (Cobb *et al.*, 1992). While the survey of the higher education sector revealed that most university finance officers had an understanding of what was meant by the term cost driver and what were the most appropriate drivers in relation to different types of expenditure, there was still a reluctance to consider it, as evidenced by the fact that 31% of respondents had not undertaken a serious discussion on the introduction of ABC. Unfortunately it is a complex exercise to split costs between courses, research and even academic departments. Staff and students draw on shared central

resources, such as libraries and computer facilities. The two most expensive inputs, teaching staff and accommodation, are also shared, and are inherently difficult to apportion to courses on an equitable basis.

As already noted, it is commonly argued that attaching a cost to an activity raises the awareness level of users as to the price and value of that activity. This, in turn, can be used to change behaviour patterns leading to better designed courses so that they minimize the use of those activity related resources that are expensive. Interestingly, there is evidence to suggest that managers deliberately opt for behaviourally-orientated cost systems that are less accurate than costing techniques allow in order to induce desired behavioural responses (Merchant and Shields, 1993). Therefore, simple costing models may be more beneficial to educational institutions than complex ones.

Influences on behaviour that are a direct result of the introduction of costing models can be seen where, for example, universities impose cost premiums on the use of available teaching space. Scapens and Ormston (1994) and Tomkins and Mawfitt (1994) observed that there was a sudden surplus of available teaching accommodation where there had been none before the time when faculties/schools were charged for space usage.

In their conclusion, Port and Burke make the point that ABC 'helps academic managers to understand the factors which influence the costs of teaching as a whole, and the costs

of individual courses'. This understanding is important in decision-making processes. For example, it has been claimed that substantial increases in productivity are possible if faculty are willing to take a cost-conscious and fresh look at how their institutional activities are organized (Smith, 1971).

Of the universities who have published details of how they cost their activities, comprehensive and unproblematic costing systems seem rare. The University of Manchester decided from an early stage to opt for a simplified system of cost drivers (Scapens and Ormston, 1994). The University of Wales College, Cardiff had difficulties in classifying activities between research, teaching and other services (Groves *et al.*, 1994), while Leeds Metropolitan University had problems in apportioning its overheads to courses (Burnett, *et al.*, 1994).

Oxford Brookes ran into difficulties in terms of the complexity of the model that was being developed and had to turn to an external consultant for an appropriate software package: the volume of information generated exceeded the capability of their in-house spreadsheet model (Bradshaw and Holmberg, 1993). Southampton University, which started with an elaborate model employing a set of 22 cost drivers, ended up using just three in the final version of their costing system (Bourn, 1994). Despite these difficulties ABC still has much to offer.

Does ABC have a Future in Higher Education Institutions?

ABC has come to be regarded as the most significant costing innovation in recent years. While its detractors say it is merely a rehash of old costing principles, its defenders claim it is bringing a new dawn not just to matters of costing, but also to the management of businesses. The findings of this survey were mixed from the perspective of ABC achieving dominance as a costing method within institutions of higher education. Few universities had implemented a full ABC system, although some had used a simplified form of ABC. Nevertheless, ABC could still have a wide role to play as educational institutions develop their cost management systems.

As higher education continues to function in a period characterized by limited resources and constraints on growth, it is clear that an assessment of the cost of institutional activities will become an ever more important component of every management decision. While traditional costing methods undertaken by the central finance department are still important for defining the expenditure incurred by faculties, schools and departments, it is clear that there is a growing need for an entirely different kind of analysis. This would be one which will aid planners and administrators at the sharp-end of the organization—the academic department—in costing to a detailed level.

The findings of this survey suggest that institutions have made little progress to date in moving towards ABC. This may be about to change,

however, because of growing pressure from central government for reform and the need for institutions to demonstrate that they are effectively managing their funds. It would be interesting to repeat the survey exercise again in another five years' time. By then, more sophisticated costing systems may be in place at most institutions and the subject of costing might be less of an immediate problem for the sector to address.

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When the Whistle Blows

Since July 1999 workers in the UK have enjoyed the protection of the Public Interest Disclosures Act – the most far-reaching whistleblower law in the world. The clearest signal is being sent to employers that they have a role to play in bringing about a cultural shift in the workplace. The Act protects workers fully wherever they raise concerns arising from reasonable suspicion of malpractice. The scope of the Act is wide and it provides for unlimited compensation. Is your organisation aware of its obligations and will you be ready when the whistle blows?

Background

“One of your neighbours drives back from the pub every Saturday night. You are fairly certain that he is over the limit.” Do you:

- 1 Alert the police.
- 2 Speak to your neighbour.
- 3 Say nothing.
- 4 Get a lift home from him.

This was one of the ethical questions posed to the delegates at last year's CIPFA Conferences in Birmingham and Belfast. Using anonymous voting pads the diversity of response was significant and served to illustrate the point that, generally, we don't like raising concerns. The reasons can be varied: we don't want to cause trouble, our

suspicions might be wrong or we may fear victimisation. Similarly, the culture in many workplaces is to ask no questions, work hard and keep your head down. The problem for organisations is that as long as this culture prevails then, when someone suspects something is wrong they are unlikely to raise the matter internally. They will either keep quiet or disclose the concern outside. The latter option is unpalatable and the option of keeping quiet can store up disaster. Indeed, some well-publicised disasters of the last decade were key to instigating the drafting of the Public Interest Disclosure Act (the Act).

Almost every public enquiry into recent major disasters has found that workers had been aware of the danger but either had been too scared to sound the alarm or had raised the matter in the wrong way or with the wrong person. Such disasters include the Clapham rail crash, Piper Alpha, and the collapse of BCCI. Even when workers did raise the alarm often concerns went unheeded. This is reflected in the Sheen Inquiry conclusions, arising from the Zeebrugge ferry tragedy, which found that staff had on five occasions raised concerns that ferries were sailing with their bow doors open.

Against this background the Nolan Committee was reporting on Standards in Public Life and was reaching similar conclusions to these public inquiries. In his report Lord Nolan stated: "One of the conditions in which fraud and malpractice can occur is the absence

of a mechanism by which concerns can be brought to light without jeopardising the informant". As a consequence of these pressures the Act was drafted and passed into law thereby creating a framework for whistleblowing across the private, public and voluntary sectors.

The Principles of the Act

Essentially, the Act is all about reassuring workers with genuine concerns over malpractice that it is safe to raise them. It protects individuals who make certain disclosures in the public interest and allows such individuals to bring action in respect of victimisation. In doing so it seeks to promote better accountability and more efficient regulatory oversight. It also strives to signal a change in the culture yet does balance this by providing safeguards against trouble-makers. Rather than being seen as another regulatory burden it should be regarded as a governance tool that makes good business sense. After all, as well as averting disaster it is likely to reduce claims made against the organisation.

The Scope of the Act

The scope is widely cast. It protects employees, workers, agency staff, homeworkers, trainees and NHS professionals. There is no qualifying period, compensation is unlimited and the Act overrides any gagging clauses. The only exclusions relate to security officers, police officers, volunteers and the genuinely self-employed. The range of protected concerns is extensive and spans

across crime, breach of contract, negligence, or any other legal or regulatory obligation, danger to health, safety or the environment, miscarriage of justice and cover up of the same.

Making disclosures externally

The Act enables workers to make wider disclosures if there is an honest and reasonable belief that concerns being raised are substantially true, reasonable and not for personal gain. However, this can only be done if these concerns have already been raised internally or with a prescribed regulator. But a concerned worker can bypass this last condition if they reasonably believe they would be victimised or that a cover up might take place. In addition, a worker can go directly outside the organisation if they reasonably believe their concerns are exceptionally serious. Clearly, this places considerable onus upon the employer to ensure that robust internal arrangements to receive concerns are in place and that proper protection can be offered.

What needs to be done?

Although the Act does not stipulate that organisations establish whistleblowing policies it is difficult to see how compliance can otherwise be achieved. Certainly, the expectation would be that all public sector bodies put such policies in place in order to:

- deter and detect malpractice
- show openness to concerns
- signal to staff how concerns can

be raised

- demonstrate that victimisation is unacceptable
- reduce the risk that wider disclosures will be protected under the Order.

The key elements of a whistle blowing policy are set out below:

- give a clear commitment from the top to this issue
- indicate the sorts of matters regarded as malpractice
- create the opportunity to raise concerns outside the line management structure
- respect the confidentiality of staff raising concerns if they wish
- indicate the proper way in which concerns may be raised outside the organisation if necessary
- allow access for advice to an external body, such as an independent charity
- give staff of key sub-contractors access to your whistleblowing procedure
- provide feedback to the whistleblower
- leave staff in no doubt about the avenues open to them under their whistleblowing arrangements.

Next steps

The Act has wide reaching implications for virtually all employers. It is not simply about interpreting and responding to a piece of legislation; it signals a shift in the way all organisations listen and respond to their staff. Unfortunately, as a Private Member's Bill, the Act did not receive the full weight of publicity associated with other legislation. However, that does not lessen its obligations and subsequent penalties if we get it wrong. And there is work to do – at the Belfast CIPFA Conference, only 34% of delegates

believed that their organisations had assessed the implications of the Act. More positively, the Act should be regarded, especially within public bodies, as a vehicle to demonstrate good governance and clear accountability. It represents an opportunity to promote the issues in our own organisations through policy revision, consultation and implementation. It cannot be a bad thing if it prompts boards to consider the balance between their interests and those of the public.

This article has been produced from the session delivered by Tim Crowley, Chairman of the Anti Fraud and Corruption Panel and Steve Connor (Mersey Internal Audit Agency) at the 1999 CIPFA Conferences in Belfast and Birmingham. It has drawn on material produced by the independent charity Public Concern at Work. It was first published in Audit Viewpoint Issue No. 42, March/April 2000.

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