

Efficiency or Effectiveness? Performance indicators in tertiary education

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ABSTRACT

This paper reviews some of the recent developments in higher education from Britain and Australia in performance measurement, and in the development of performance indicators with which to assess the efficiency and effectiveness of tertiary education institutions. It also raises some questions about the problems of performance measurement, and argues that educational 'managers' in New Zealand can learn from recent Australian and British experience in recognising the need to focus on questions concerning the evaluation of effectiveness. There is also an implicit assumption underlying the paper that tertiary education managers can learn from the developments that have been occurring more generally in the public sector, especially in view of the fact that many public sector organisations have been to the forefront in meeting the demand for greater public accountability.

1. Introduction

Despite major differences in orientation and emphasis, all of the main reports produced in the last few years on higher education in New Zealand agree on the need to improve the operational efficiency and effectiveness of the various institutions comprising the sector. This fact should not be surprising: it is difficult to imagine that any group whatever its political persuasion could withhold its assent to the bald proposition that polytechnics, universities and colleges of education (along with other public sector organisations), should attempt to improve the efficiency ('productivity') and effectiveness of their institutions. The major objectives of the Hawke Report - enhancing efficiency and accountability and increasing devolution/decentralisation (together with enhancing the role of tertiary education achieving social equity goals, and integrating national administrative systems)- are agreed to for instance by both the New Zealand Vice Chancellors' Committee (Annual Report 1988:10) and AUT (see, for example, the response to PCET by the Waikato Branch 1988).

Disagreement has been voiced on the issues concerning the proposed structure, the separation of teaching and research, the nature and annual negotiation of charters, the status of councils and the introduction of any form of personalised education tax. Even so, on major objectives, given the scarcity of resources in these financially stringent times, there might be said to be an emerging consensus among major stakeholders. Just how these objectives should be achieved and monitored however, is a major source of contention and political debate.

The call for improved efficiency and effectiveness, of course, has not been restricted to higher education or, indeed, to the education sector more generally. It has also provided a major rationale for the restructuring of the whole public sector, for privatisation and corporatisation strategies.

Underlying the concern for improved public sector accountability is an instrumental economic rationality exemplified in the now dominant belief in the use of market forces to induce greater efficiency. Where privatisation has been seen to be inappropriate or politically unfeasible a variety of approaches have been taken to improve the efficiency of public service delivery. In New Zealand a major alternative strategy to privatisation has been a form of decentralisation involving the devolution of responsibility from the centre to individual institutions.

In brief, this alternative strategy is based upon a simulation of the market: it is argued that only when public sector 'managers' have the 'freedom' to manage resource, without political interference or constraints, will gains be made in terms of operational efficiency. In the post-Hawke climate, in which more competitive and entrepreneurial modes have been established, a major emphasis has fallen on a managerialist ideology and the consequent adaptation of private sector management processes and tools to public sector enterprise.

In general, and often without any real appreciation of private/public sector differences, this has meant the uncritical adoption of the Traditional Management Control Paradigm, as in Figure 1:

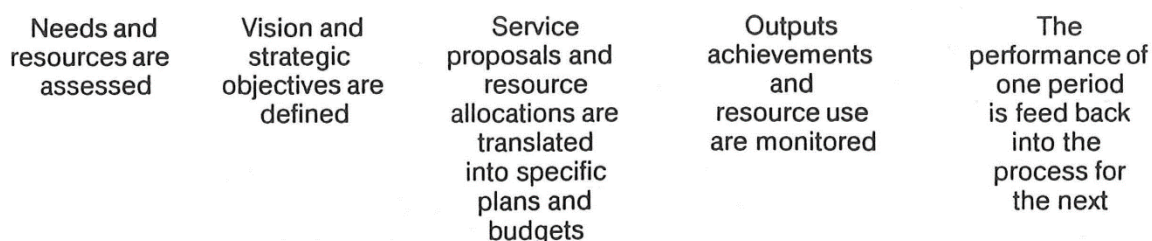


Figure 1: The Traditional Management Control Paradigm (Source: Audit Commission: Performance Review in Local Government, 1986, In Tomkins (1987:78).

Under this rationalistic model an organisation's objectives are clarified, roles are specified with well defined responsibilities, tasks and priorities are set, clear lines of delegation are established, and output is measured against the stated objectives at each level of the hierarchy. It is in this context that there has been an upsurge of interest in the development of performance indicators on the understanding that, in the absence of a single objective comparable to that of the profit objective of the private sector, public accountability can be based on principles of performance measurement.

Reflecting on the recent British experience Tomkins (1987) makes a number of points relevant to the discussion in New Zealand. First, what appears to be a politically neutral quest for efficiency in the public sector cannot reduce political problems to economic or management ones. Second, Tomkins (1987:43) indicates that in the haste of public sector managers to emulate their private sector counterparts - a move which is predicted on sparse and inconclusive empirical evidence favouring private sector efficiency- 'there is a remarkable lack of recognition in the public sector management literature that this "control paradigm" is only one way of looking at an organisation'. Third, gains from the improvement of operational efficiency are most valuable not in the short run but rather cumulatively over the longer run - a fact which presents real measurement problems. Fourth and finally, to generalise a point, to date 'most emphasis has focused on accountability for efficient performance rather than employee welfare and consumer service'. This abiding concern for efficiency at the expense of institutional responsiveness or effectiveness, in the short term can greatly damage institutional 'culture' and create more problems than it appears to solve.

Higher education in New Zealand is some years behind the experience of Britain and Australia both in developing and conceptualising performance measures. As Tomkins (1987:31) indicates, the concern for efficiency in Britain has moved on since the heady days of the Rayner Scrutinies and FMI

(Financial Management Incentive). According to Tomkins, there are a few signs beginning to appear that the initial emphasis with the idea of getting a grip on efficiency was over-stressed. At the same time, he notes, a better understanding is emerging of the 'excesses of private sector management approach in a sector where a consensus culture or management style has existed for years'. The debate over efficiency, in other words, has shifted to a second and more sophisticated phase which appears to recognise the need to raise serious questions about the evaluation of effectiveness. Tomkins (1987:43) makes the point clearly: 'Efficiency is not synonymous with effectiveness. Ultimately we must relate spending to the value derived from the outputs in terms of benefits to society. An improved input-output ratio has only limited value if we are not sure that we should be doing this activity at all or that it could not be done in an entirely different way'. The message is clear that management must move beyond efficiency questions to confront the more complex issues of the concept and measurement of effectiveness. Tomkins' cautions ought to be well heeded in New Zealand.

2. Performance Indicators: Some Examples

A. National Performance Indicators for TAFE, Australia

Goldsworthy (1988) reports on a recent workshop for a group to TAFE (technical, advanced and further education) planners who met for two days in February 1988 to develop a series of common measures. The workshop participants reached a consensus on a set of national indicators and a report was to be presented to the Australian Conference of TAFE Directors for their consideration.

The conceptual framework employed emphasises considerable care needs to be taken when developing performance indicators at the corporate level to ensure that:

- i. They relate clearly to the organization's main objectives;
- ii. A managerial structure exists to ensure that relevant data are collected;
- iii. They are used at appropriate levels throughout the organization;
- iv. They affect resource decision-making; and
- v. The production of performance indicators is, itself, cost effective and represents value for money (Goldsworthy 1988:3).

While the report recognises the traditional distinction between concepts of efficiency and effectiveness' efficiency indicators will help ... identify whether the maximum quality outputs are being achieved from the given inputs, ... effectiveness ... ensures that the right output is being produced' (Goldsworthy 1988:3) - the distinction is made light of and the complex issues of evaluating effectiveness is treated in a totally unproblematic way. Further, it is clear that the question of effectiveness is still approached in terms of management's goals even though there are indicators which refer to student and industry satisfaction.

Figure 2 below outlines the indicators mentioned in the report.

A. <u>Efficiency Indicators</u>		<u>Measure</u>
i)	a. Average class size per FT staff b. Average hours per FT staff)Staff resources
ii)	Recurrent costs per student per subject	basic cost analysis.
iii)	Student contact hour per seat of student capacity))space utilization.
B. <u>Effectiveness Indicators</u>		<u>Measure</u>
i)	Graduate success rate	employment; further study outcomes
ii)	Student course satisfaction	student satisfaction
iii)	Examination pass rate	skill acquisition
iv)	Sat examination rate	retention (proxy)
v)	Participation by demographic	social justice goals
vi)	Industry satisfaction	employer satisfaction
vii)	Annual graduate numbers)output measure of number)of qualified students

Figure 2: National Performance Indicators for TAFE
(Source: Goldsworthy, 1988).

Figure 2: National Performance Indicators for TAFE (Source: Goldsworthy, 1988).

The remainder of the TAFE report is concerned with providing additional information on each of the indicators (description, definition, data course, frequency and scope of data collection, formula results, issues, use and presentation).

B. Performance Indicators in British Institutions of Higher Education.

Sizer (1988: 152) comments that performance measurement, indicators and assessment received very little attention in Britain during the 1970's. And yet, as he points out, 'During the last five years, economy, efficiency and effectiveness, performance indicators, executive styles of management, devolved budgeting, accountability and institutional, departmental and individual performance assessment have risen high on the agendas of the Treasury, the DES, the NAB and the UGC, the Committee of Vice-Chancellors and Principals (CVCP) and the Committee of Directors of Polytechnics (COP), and the individual institutions'. He acknowledges further that under the Conservative Government's commitment to a market economy and to reducing public expenditure, institutions of higher education (and in particular the universities) are under pressure to change their 'institutional culture' from 'the free, oligarchic and consensus model, supported by administrative styles of management, which assumes that strong professionals on lifelong tenure are allowed to regulate both resources and academic developments and judgements through collegial means ... to an entrepreneurial and market economy with executive styles of management' (Sizer, 1988: 153).

It is against this background and pressure for change that the UGC in 1981 announced cuts in grants to universities averaging 17 per cent. Further, differential cuts of grants have been made more recently based on the UGC's review of each university department's research record

(departments were placed in different categories of performance) and on efficiency comparisons (for example, in terms of costs per student). The Jarratt Committee (1985) was established by the Government to investigate the management process of universities and report on their efficiency. The Committee drawing on work completed by the Centre for Educational Research and Innovation of the OECD, recognised the use for 'reliable and consistent performance indicators' as an integral part of the process of planning and resource allocation both at the national level and within individual universities. Such performance indicators are intended to provide an information system for academic and management decision-making and policy judgements. (see Figure 3.)

1. Expenditure per FTE student.
2. Expenditure per FTE academic staff.
3. Expenditure on support staff per FTE academic staff.
4. Expenditure on equipment per FTE academic staff.
5. Research income per FTE academic staff.
6. Research postgraduates as a % of FTE students.
7. Taught postgraduates as a % of FTE students.
8. All postgraduates as a % of FTE students.
9. Ratio of FTE students to FTE academic staff.
10. Central admin expenditure as a % of grand total expenditure.
11. Central admin pay expenditure as a % of central administration expenditure.
12. Central admin expenditure per FTE student.
13. Central admin expenditure per FTE academic staff.
14. Library expenditure as a % of general expenditure.
15. Publications expenditure as a % of library expenditure.
16. Library pay expenditure as a % library expenditure.
17. Library expenditure per FTE student.
18. Library expenditure per FTE academic staff.
19. Book expenditure per FTE student.
20. Periodicals expenditure per FTE student.
21. Computer services expenditure as a % of general expenditure.
22. Computer services pay expenditure as a % of computer services expenditure.
23. Computer services expenditure per FTE student.
24. Computer services expenditure per FTE academic staff.
25. Total premises expenditure as a % of total general expenditure.
26. Premises pay expenditure as a % of premises expenditure.
27. Heat, water and electricity expenditure as a % of total general expenditure.
28. Cleaning and custodial services expenditure as a % of total general expenditure.
29. Repairs and maintenance as a % of a total general expenditure.
30. Telephone expenditure as a % of total general expenditure.
31. Total premises expenditure per FTE student.
32. Heat, water and electricity expenditure per FTE student.
33. Heat, water and electricity expenditure per FTE staff.
34. Cleaning and custodial services per FTE student.
35. Repairs and maintenance expenditure per FTE student.
36. Telephone expenditure per FTE student.
37. Careers service expenditure per FTE student.
38. Student unions and societies expenditure per FTE student.

Figure 3: Performance Indicators for Use by University Managers. First statement by CVCP /UGC Working Group. Source: Sizer (1988:157).

Note: The CVCP/UGC indicators are intended for different users: department, cost centre and institution. For example, the first nine indicators are seen as appropriate for cost centres while indicators six to thirty-eight are seen as relevant to institutions.

It is not clear, given the list of performance indicators published by the CVCP/UGC group how universities are to make complex decisions concerning effectiveness when most of the measures, are confined 'to input, process and one set of outcome' and consequently 'are more useful in assessing efficiency than effectiveness' (Sizer, 1988: 156).

The realistic complex decisions that universities customarily have to make (like other institutions of higher education) such as policy judgements of 'trade-offs' for example, balancing the pressure for increased efficiency in the short time with the need for long-term effectiveness simply cannot be made. Further, it seems that at the present state of measure development we are still a long way from being able to make reliable, equitable and valid assessments of effectiveness. It is crucially important to the nature of educational activity that we do not settle for crude and obtrusive measures of effectiveness before there is time to conceptually explore different approaches and adequately pilot and 'test' them. This is one of the lessons that education managers in New Zealand might take from the overseas evidence. Sizer (1988:156), an enthusiast for developing both a more entrepreneurial and market economy culture within universities and a commitment to executive styles of management, recognises that 'considerable difficult work has still to be undertaken on effectiveness measures, particularly in the area of research and the longitudinal impacts of teaching outputs'.

Sizer (1988) acknowledges that the task of developing inter-institutional comparisons of research performance is going to be difficult and complex and clearly he conceives of a system which begins at the level of the individual, linking performance appraisal with notions of staff development, and building up to institutional assessment. Fears about linking the notion of performance indicators, driven by pressures for greater accountability, with issues of professional (staff) development have surfaced in the Australian context. The Federation of Australian University Staff Associations (FAUSA) commenting on the Report by a Working Party on Staff Development established by the Australian Vice-Chancellors' Committee (AWC) criticise its management orientation and quote Harpley's response to it (a preliminary examination of the Working Party's Report for the FAUSA Executive, Supporting Paper no. 7:4):

the most notable feature of the Report is the way in which it confuses and conflates two separate and separable issues: that of the accountability of universities to ensure their effectiveness, particularly in the area of teaching, and that of the personal professional development of academic staff. These are importantly different in the direction and focus of orientation of any activities.

For the political implications of performance assessment and of models of staff appraisal see Pollitt (1987;1988).

Currently, the Thatcher Government in Britain is attempting to connect 'the question of increasing academic salaries to questions of personal performance evaluation in terms of research and teaching, the removal of the right to tenure of one's academic position and other efficiency matters' (Tomkins, 1987:42).

The quest for efficiency in this context and its reflection in the wholesale adoption of private sector management processes, together with an accompanying preoccupation with the measurement of performance have the potential to fundamentally change the nature of institutions of higher education (and, in particular, universities). The result may be to impose an adversarial management cost accounting 'culture' on traditional structures of consensus-style management and accountability. This would effectively cut across entrenched values of institutional autonomy, academic freedom, collegiality, peer review, cooperation and support which are at the heart of both local and international academic communities.

3. Performance Indicators: Some Problems of Measurement

Both the polytechnics and the universities of New Zealand are currently in the process of developing performance indicators with which to assess the efficiency and effectiveness of their respective institutional systems. The New Zealand Vice-Chancellors' Committee (NZVCC), for instance, has established a joint working party with the University Grants Committee. In their Annual Report (1988:3) the NZVCC states: 'A Review of international literature on the topic reveals a fair amount of scepticism about the reliability of some indicators, and for the moment considerable judgement is required when applying them to matters of resource allocation'.

The committee's concern for developing a set of performance indicators is a direct result of recommendations advanced in the Watts' Report (1987) which along with a consideration of issues of accessibility and social equity, emphasises the need for universities to improve 'managerial effectiveness' and the 'efficiency of internal operations'. To this effect the Report recommends at 3.5 that:

- a. 'performance indicators be more widely used ... and that these indicators be developed jointly by the University Grants Committee and the Vice-Chancellors' Committee;
- b. each university devise operate an explicit array of criteria (internal performance indicators) for monitoring the quality of performance and responsiveness of its programmes'.

In the body of the text, the Report (1987:53) continues:

A more systematic and comprehensive approach to measuring the effectiveness and efficiency of universities is the use of performance indicators. A great deal of work on such measures has been carried out under the auspices of OECD and also in the United States. These cover operational indicators, such as student and staff workloads, unit costs by programme, research income, and expenditure on administration, on libraries, on computers and various services, plus a range of financial monitoring yardsticks. External performance indicators may cover destinations of graduates, their acceptability, and the quality of research as assessed by external experts.

The Watts' Report emphasises that performance indicators are 'not a substitute for good management' but rather should be seen as a management aid which will contribute to improve accountability and serve as 'a tool for making comparisons both with and between institutions' (ibid). A similar perspective emerges from the Probine-Fargher Report (1987:ii). There is expressed concern for devices to improve accountability not only through improved financial management systems but also through the 'use of corporate planning techniques which emphasise use of measurable objectives against which performance can be assessed'.

Our Australian neighbours are, arguably, more aware of the dangers and pitfalls in the application of concepts of efficiency and effectiveness to higher education. In *Review of Efficiency and Effectiveness in Higher Education* (Report of the Committee of Inquiry, Commonwealth Tertiary Education Commission, 1986: 1) the committee begins by pointing out, in classical terms, the difference between the two crucial concepts, efficiency and effectiveness. 'An efficient system is one which enables given outputs to be met at the lowest possible level of inputs or cost. However, a system which is efficient in this sense will not be worth much of what is achieved is only of limited value. Hence, the effectiveness of a system - the extent to which the output achieves specified objectives - is also important'. (*Review of Efficiency and Effectiveness in Higher Education*, 1986: 1). They go on to show how problematic their relationship is when applied to higher education, as follows (The author has extended and developed some of the criticisms).

- a. The problem of the evaluation of effectiveness.

'The determination of effectiveness assumes that the objectives can be clearly identified and that there is agreement on them'. These assumptions are open to question the moment it is admitted that competing interests may identify different, possibly conflicting, objectives or that different priorities within a set of objectives may be arrived at.

Further, the central assumption underlying measurement is that appropriate indicators can be matched against objectives and that these are open to quantification without distortion. Long term, cumulative effects are often resistant to any form of accurate measurement and, in lieu of fine-grained, sophisticated, measures managers will settle for what is currently available.

b. The problem of multiple, and mutually inconsistent objectives.

The formulation of objectives will depend to a large extent on the view taken of the purpose of education, generally, and that of the particular institution, specifically. Objectives may vary not only across institutions but also within institutions, between departments, faculties, schools and across individuals.

Some objectives may be mutually inconsistent for example, seeking to increase participation in higher education while trying to avoid a surplus of graduates or attempting to produce high quality basic research yet responding quickly to the needs of industry.

c. The problem of complexity.

'Given a variety of objectives, it follows there are rarely any simple criteria for measuring success in achieving objectives'.

For example, how is it possible to balance, say, the number and quality of graduates against an assessment of additional knowledge and personal growth?

d. The problem of employing appropriate timescales.

There is 'not always agreement on the timescale for assessing outcomes'. To what extent it is possible for higher education management to calculate generational dividends under the constraint of an annual or triennial government budgets?

The Committee concludes their discussion by asserting that there are 'no absolute criteria against which to measure efficiency or effectiveness. They are matters of judgement, often involving "trade-offs" between effectiveness and cost' (1986:2).

Significantly the committee concludes:

By making institutions and their staff the agents of reform, standards can be increased and morale improved. The Committee is convinced that this approach is more conducive to high levels of efficiency and effectiveness than greater outside direction or influence through increased bureaucratic control or the free rein of market forces (1986:18).

In other words, the committee favours a model of self-evaluation in Australian higher education as opposed to any other approach, and indicates that more can and should be done to build a practice and culture of self-evaluation.

The problems of performance measurement are of course, an area of continuing debate and research in the literature (see, for instance, Landy et al, 1983). It is appropriate here briefly to refer to a further couple of sources which are instructive in that they refer to recent British experience.

Jackson (1987) addresses the issues raised when considering performance measurement and efficiency appraisal in the public sector. He begins by listing the common characteristics the literature sets down for performance indicators, viz.

- i. they must relate to the stated objectives of the organisation;
- ii. they must be specific, quantifiable and standardised so that the information can be used for making valid comparisons within and between institutions;
- iii. they must be as simple as possible consistent with their purpose;
- iv. they must be acceptable and credible in the sense of being free from systematic bias;
- v. they must be useful and capable of acting as signposts to areas where questions concerning operations can and should be asked.

While the checklist looks straightforward, problems arise when the implementation process begins. He summarises his findings thus:

'This discussion suggests that there are severe problems involved in assessing the performance of the public sector at the macro level. the difficulties arise from:

- a. a lack of clear overall objectives;
- b. ambiguities in the interpretation of what constitutes the "public interest";
- c. no physical measures of outputs;
- d. multiple objectives which frequently conflict;
- e. a lack of cooperation between different departments who contribute to the solution of a common problem'.

(Jackson, 1987:13).

None of these problems are novel but a further set of problems emerge in the implementation of performance measures both at the institutional and macro levels. Jackson (1987: 14) asserts that the employment of performance indicators raises the following sorts of questions:

- a. who gives guidance on performance indicators?
- b. is performance monitored?
- c. do internal or external reviews exist?
- d. how do reviews fit into existing management systems?
- e. what is reviewed?
- f. what happens as a result of the review?
- g. does performance measurement change the organisational process or structure?
- h. does performance measurement change policy?
- i. what indicators other than financial indicators are used to measure performance?
- j. over what timescale do performance measure apply?
- k. how are different performance indicators aggregated?

Jackson (1987: 14) also notes that the impact of performance measures on an organisation's activities are unlikely to be neutral in the sense that they create incentives and disincentives and, accordingly, change the behaviour of individuals. A crucial question here is whether the change in behaviour is just an attempt to ensure that an index is satisfied, or is more profound. This concern relates to how carefully the system is reviewed and monitored and involves questions regarding the costs of measuring and monitoring performance, compared to an assessment of the benefits.

More fundamental still is the question, if performance indicators account only for the measurable dimensions of a task what happens to the immeasurables? Jackson (1987:14) poses the question, is it possible that the 'immeasurables' are more important?

A teacher could increase class sizes, improve his or her pupil teacher ratio and reduce unit costs but what has happened to the quality of the educational output? A reduction in quality is an immeasurable reduction in performance. It is not legitimate to claim the improvement in student/staff ratio as an improvement in value for money or productivity under these circumstances.

A further set of problems emerges at the macro level when performance indices are developed or used to compare different institutions producing a similar service. The implementation of standard costing in the public sector is fraught with difficulties. Any calculations of standard costs depend on knowledge of the nature of the cost function and, at present, there is insufficient information available to allow reliable standardisation. Jackson (1987:15) lists the following issues that need to be considered further if performance measures are to be used to make comparisons between institutions:

- i. can cost functions be estimated in the absence of clearly defined output measures?
- ii. which costs are fixed and which variable?
- iii. are variable costs linear?

- iv. are variations in unit costs due to differences in the underlying production functions - how does this relate to differences in the quality of output?
- v. is the cost function stable over time?

Jackson (1987) demonstrates that there are a set of interrelated problems concerning both the Interpretation and implementation of performance measurement. These problems need clear recognition in the New Zealand context of tertiary education where the quest for efficiency and effectiveness increasingly loom large. This is especially so in a climate where the tertiary sector may well face the prospect of receiving less than its previous proportion of Vote Education due to changing national priorities favouring other areas such as early childhood education. Pollitt (1987;1988) attempts to identify specifically political purposes and consequences surrounding the introduction of performance assessment. He notes that the list of characteristics for performance assessment indicators proposed by Sizer (1982:66) (ie. that they should be 'relevant, verifiable, free from bias, quantifiable, economically feasible and institutionally acceptable') in practice are next to useless. He acknowledges that Sizer himself recognised the difficulty of achieving any one of these qualities, let alone their accomplishment simultaneously (Pollitt, 1987:87). In reviewing the relevant literature, Pollitt (1987) comes to the conclusion that the various attempts to introduce schemes in Britain (in civil service, local government, the National Health System, the police, the prisons, and schools) have been informed by a wide variety of purposes, which he sets out in the form of a table (see below, figure 4). In practice, Pollitt (1987) maintains, there is a heavy emphasis on purposes (three and four) which are concerned with efficiency and the allocation of resources (ie. economy) at the expense of the achievement of other objectives or purposes. He argues that managerialist schemes which place a high value on efficiency and economy 'may actually reduce the chances of achieving other kinds of objectives, particularly those concerned with effectiveness, professional development and collegiality' (Pollitt, 1987:87).

In particular, he indicates that there is a tension between 'top-down' efficiency schemes and professional development in terms of their organisational/cultural assumptions - a matter which he addresses more fully in another paper (see Pollitt, 1988 and Appendix 1 for a diagrammatic summary).

Finally, he suggests that of greater political significance for public service organisations and higher education in the future is the relationship between professional providers and consumers, and he attempts to outline the characteristics of an emergent consumer model. In New Zealand, the demands of the consumer of public service organisations have been addressed under the notion of responsiveness and to a lesser extent, effectiveness (see, for example, *Sharing Control*, 1988). If institutions of higher education in New Zealand are to address questions of the evaluation of effectiveness and responsiveness in a serious fashion, there is a genuine need to pay heed to issues of consumer/client satisfaction in a systematic way which both regularly elicits data on judgements of appropriateness, relevance, and satisfaction, and ensures that 'consumers' have a direct say in the design and operation of data collection systems.

Prior to institutionalising such a client-oriented system, conceptual questions concerning the status of various 'consumer' or 'client' groups must be confronted. In higher education it is not at all clear who the 'consumers' or 'clients' are, what relative weightings ought to be assigned to the various interests involved, how related notions like the 'public good' ought to be defined, or, indeed, even whether the nomenclature of 'consumer' or 'client' is entirely appropriate.

Purpose	Comment
1. To clarify an organisation's objectives.	Requires extensive involvement from political leaders/top management. Politically a dangerous activity, but potentially very valuable.
2. To evaluate the final outcomes impacts resulting from an organisation's activities.	The ideal of performance assessment. Very difficult to achieve not least because of problems of time and multi-causality. But there are some such measures in use, eg. changes in perinatal mortality for the NHS.
3. To indicate areas of potential savings by comparing patterns of inputs and outputs (ie. developing efficiency ratios).	Very commonly used. Typically compares similar organisations one with another (eg. schools, social security local offices, District Health Authorities) or performance within one organisation over time.
4. As a trigger to raise questions about the organisation of resources.	Again, very common. Even fairly elementary indicators may be useful as 'trigger' (eg. the 1983 set of NHS P.I.s).
5. As an input to staff incentive schemes.	Requires highly disaggregated data (to show individual 'performances'). Tends to 'politicise' relationships which were previously 'non-political' or only so to a small degree. Raises issue of 'fairness' in a big way.
6. To help determine the most effective level of service for obtaining a given target.	Indicators of this precision are still relatively rare. They show how much the effectiveness of a service rises with each successive increment of resource. The relationship between effectiveness and resource inputs is seldom a simple, linear one.
7. To indicate standards in the licensing or contracting of privatised services and to monitor fulfillment of these standards.	Contracting out remains politically controversial. The private contractor may be charging less for running the buses or cleaning the hospital, but what is the accompanying accident rate/standard of hygiene? If these aspects of quality are not systematically monitored comparison may remain predominantly ideological rather than empirical.
8. To indicate how far different activities contribute towards single policy goal.	May be very useful in resource allocation, eg. if research indicates that per pound spent, seat belts contribute more to saving life on the roads than advertising or improving road lighting.
9. To enable consumers to make better informed choices.	A relatively neglected area, at least in the UK. Many schools now include exam performance data in their booklets for parents. Consumer groups beginning to be more active in developing their own schemes.
10. To provide staff with feedback designed to enable them to develop and improve their practice.	Typically by peer group discussion, informed by relevant observations and statistics, eg. a consultant's perioperative mortality rate compared with his/her peers; a teacher's students' examination performances. Supportive environment usually required to encourage personal openness/'growth' and to minimise tendencies to defensiveness.

Figure 4: The Purposes of Performance Assessment Schemes & Source: Pollitt (1987:89)

4. The. Question of Effectiveness: A Note

It is not the intention behind this paper to indicate a preferred approach to the evaluation of effectiveness in higher education, but only to raise some questions or difficulties, in principle, with any approach.

Tomkins (1987:48) in discussing current developments in British public service organisations to improve effectiveness, makes the following comment:

The UK debate over improving management in the public sector has focused upon management processes. There have been calls for setting clear objectives, improving accountability for actions and improving operational efficiency, but the most basic ingredient required has been missing. How can clear objectives be formulated and how can clear accountability be devised unless there is an equally clear definition of effectiveness?

Most performance measures developed to date eschew questions concerning the evaluation and monitoring of effectiveness to focus on notions of efficiency and economy, yet the core issues of public spending can be only addressed by evaluating effectiveness. As Tomkins (1987:48) comments, even the most sophisticated attempts to review management systems assume that effectiveness can be judged in a clear and unproblematic way. Statistical comparisons of input-output ratios may be related to, but are not in themselves adequate for, the complete assessment of effectiveness (Tomkins, 1987:49). The conceptual difficulties of developing a clear and comprehensible approach are often ignored and it is assumed that the only obstacle to judging effectiveness is that we have not yet developed measures for it.

In reviewing the CVCP/UGC performance indicators Tomkins (1987:51) argues that 'the key effectiveness questions (namely the "value-added" to the student through his educational experience and the "value-added" to society by the research performed) are not covered by the indicators prescribed'. These difficulties arise from not recognising that while there are conceptual relations between the notions of efficiency and effectiveness, it is not possible to conflate or collapse them. Tomkins (1987:53) goes some way to isolating the conceptual differences, emphasising the plurality of the notion of effectiveness:

Effectiveness ... seems to have various facets which make it quite different from efficiency. An efficiency calculation assumes a clearly defined output. Effectiveness, in contrast, seems to involve all effects, whether intended or not, and needs inputs from a variety of sources. Managers, consumers, professional service providers and general employees all seem to have a part to play in the determination of what effectiveness is. Once one admits the relevance of different groups, one must allow for the emergence of competing interests.

A more fundamental criticism of the CVCP/UGC list of performance indicators and, indeed, of the assumption of measurement, in general, is that they are predicated on a particular view of 'science' (and its application to management). Positivism as the twentieth century's foundational epistemology underwriting 'science' has been subject to intense intellectual criticism. Logical empiricism (positivism) no longer holds an uncontested position in the realm of general theories of knowledge.

The pragmatic approach to the analysis of effectiveness that Tomkins (1987) favours, following Guba and Lincoln (1981), begins then with the identification of all the major stakeholders who have an interest in the service, and not necessarily with management's goals. The approach samples each major stakeholder to ascertain the major concerns of each group, and the analysis proceeds to identify underlying values and assumptions in each case, not to resolve conflicts of competing interests for policy makers but rather to promote a more informed choice of the issues to be resolved. The pragmatic approach to evaluating effectiveness is only one way among a number of alternative possibilities. What is urgently required is a meta-review of alternative approaches, identifying their relative strengths, weaknesses and applications and a general willingness of managers to initiate pilot schemes together with their careful evaluation.

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APPENDIX I

MODELS OF STAFF APPRAISAL (1)

ASPECT	MANAGERIAL	PROFESSIONAL DEVELOPMENT	CONSUMER (emergent)
<u>Primary Purpose</u>	To assist management in decisions on deployment of staff, grading, posting, promotions, retraining, remuneration, sacking.	To raise professional standards, disseminate knowledge of good practices, improve collegial communication.	To increase the responsiveness of service-provider to consumers.
<u>Cultural/Organisational Assumptions</u>			<u>Non-organisational</u>
(i) Relationships	Predominantly hierarchical and individualized.	Predominantly collegial and collective	* Consumer dissatisfaction with a service has special legitimacy as a test of service's performance.
(ii) Authority	Top-down	Authority lies with professional body/institute as much as employer.	* Consumers are competent to judge appropriateness of service, or given the information can readily become so.
(iii) Discourse	Means - ends rationality	Norm (or standard) oriented; interpretive (hermeneutic) understanding	* Consumer judgements can be aggregated in meaningful and reliable ways.
(iv) Structures	Top executives direct purposes and control time and rewards of subordinates	Peer consensus and review	
(v) Performance	External pressures, extrinsic system of incentives/sanctions	Internal: self-motivation; self-improvement ethic; intrinsic rewards.	

APPENDIX I (Cont.)

	MANAGERIAL	PROFESSIONAL DEVELOPMENT	CONSUMER (Emergent)
<u>Appraisal Scheme</u>			
(i) Organisational	Strong links to organisational reward and punishment (eg. merit pay, promotion, tenure decisions)	Review process is <u>not</u> linked to the system of extrinsic rewards/punishment	* Collection of consumer satisfaction data is regular and systematic.
(ii) Procedures	Highly standardised to enable management to compare individuals.	Peer review is central process, with self-evaluation; Appraiser - appraisee.	* Consumers or representations have a direct say in design and operation of collection systems.
(iii) Participation	Centred on superior/subordinate interaction; not applied to senior management or; if it is, in more flexible form.	All members subject to similar review procedure. No exemptions.	* It is mandatory that service providers take account of results in planning and personnel decisions.
(iv) Frequency	Regular process as part of management routines.	Negotiated with individual.	* Non-adversarial mechanism enabling providers to discuss relevant issues with consumers.
(v) Dominant Criteria	Efficiency and economy	Effectiveness and/or quality	* Information generated available to all consumers and actively disseminated.
(vi) Information	Available to management.	Confidential not available to 'consumers' or 'employers'.	

- (1) This typology of staff appraisal models represents a particular political position or purpose in a 'pure' or 'ideal type' way. Developed from Christopher Pollitt (1988) 'Models of Staff Appraisal: Some Political Implications', *Higher Education Review*, 20, 2:7-17.