



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

Deputy Vice-Chancellor (Academic) - Papers

Deputy Vice-Chancellor (Academic)

2000

Performance measures, benchmarking and value

Felicity McGregor

University of Wollongong, felicity@uow.edu.au

Publication Details

This conference paper was originally published as McGregor, F, Performance measures, benchmarking and value, Proceedings of the Australian Library and Information Association ALIA 2000 Conference, Canberra, 24-26 October 2000. Conference proceedings available [here](#).

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Performance measures, benchmarking and value

Abstract

[Extract] The announcement of the establishment of a Quality Audit Agency to evaluate the performance of universities, signalled an inevitable expansion of the incipient culture of measurement and evaluation in Australian universities. Those who consider that quality, and its associated tenets of measurement and evaluation are of dubious value, will be constrained to demonstrate goal achievement through whichever mechanisms are deemed appropriate by the Agency. Otherwise, they may face an uncertain funding future. Although the details of the audit process are not yet clear, there will be a single national body which will be responsible for overseeing independent external quality audits of universities' internal systems.

Disciplines

Arts and Humanities | Social and Behavioral Sciences

Publication Details

This conference paper was originally published as McGregor, F, Performance measures, benchmarking and value, Proceedings of the Australian Library and Information Association ALIA 2000 Conference, Canberra, 24-26 October 2000. Conference proceedings available [here](#).

Performance measures, benchmarking and value

Felicity McGregor

Introduction

The announcement of the establishment of a Quality Audit Agency to evaluate the performance of universities, signalled an inevitable expansion of the incipient culture of measurement and evaluation in Australian universities. Those who consider that quality, and its associated tenets of measurement and evaluation are of dubious value, will be constrained to demonstrate goal achievement through whichever mechanisms are deemed appropriate by the Agency. Otherwise, they may face an uncertain funding future. Although the details of the audit process are not yet clear, there will be a single national body which will be responsible for overseeing independent external quality audits of universities' internal systems.

Universities will be asked to establish their own goals and conduct a self-assessment across the full range of their activities. The actual details of the audit process are still being negotiated. It is intended that all universities will be assessed every five years. Eventually, a university which fails to respond adequately to criticisms within the Agency reports could have its funding withdrawn.

The full range of activities will assuredly include libraries, which are a significant investment for universities or, depending on your perspective, a huge drain on resources. Although self-evident to many, it has always been problematic to demonstrate the value of libraries. One of the main reasons is that it is difficult, if not impossible, to place a value on information - our main product.

Libraries have been conscientious in producing statistical measures of collection size and the outputs of various internal processes. These have been useful, particularly when value was equated with collection size. While acknowledging that, in many instances, there is no substitute for significant, comprehensive on-site collections, technologically driven improvements in the distribution of, and access to, resources has seriously undermined the *bigger is better* value proposition. The perception that wanted information is ubiquitously and freely available and that libraries no longer have a vital role in universities has provided further impetus, in terms of future viability, for libraries to demonstrate that they are not only essential to the success of the university's researchers and students, but are of strategic importance in achieving the university's mission and goals.

Proving that libraries are of strategic importance will not be simple, no matter how obvious it may appear to those in the profession and to many of our clients. Some possible approaches, based on examples from the University of Wollongong are given below.

Closer involvement in University-level planning processes and in the development of courses in conjunction with faculties and media units, are strategies worth pursuing. Inclusion of library-related goals in statements of Graduate Attributes and University Strategic Plans are a first step. The *Attributes of a Wollongong Graduate* include:

A basic understanding of information literacy and specific skills in acquiring, organising and presenting information, particularly through computer-based activity.

The Library took a leading role in integrating information literacy into the curriculum and in developing and managing the compulsory program which is a zero credit point subject -ILIP100 - for newly enrolling undergraduate students. One simple measure is successful completion rates for this subject, the assessment, however, of competency in the skills is problematic. Work conducted at Wollongong through its Tertiary Literacies Working Party, chaired by Lynne Wright, the Library's Client Services Manager, has concluded that there is . . .clear evidence to program participants of the extent to which particular competencies, skills and attributes are present (Temmerman & Wright 2000 p 7).

Another graduate attribute acknowledges the need to inculcate skills for lifelong learning:

A commitment to continued and independent learning, intellectual development, critical analysis and creativity.

Chris Brewer, Health and Behavioural Sciences Faculty Librarian, has completed a study with our School of Nursing which aimed to evaluate the contribution of an integrated information literacy program to the inculcation of skills and student confidence in locating and using information (Brewer 1999). Although the statistical measures were inconclusive, qualitative data gained from focus groups and surveys indicated an appreciation of the value of information literacy programs to the development of study and research skills.

Other sources of measurement of strategic importance include surveys exploring value or bivariate surveys which explore importance as well as performance. The following outcomes of the 1998 UoW Student Satisfaction Survey indicate that the availability of library resources are of considerably greater importance than some other university services.

Importance of Facilities	VS%	S%	M%	G%	VG%
Library - range of appropriate texts	1	9	6.7	29.2	63.1
Library - availability of appropriate texts	2	8	6.8	28.4	63.8
PG study room or office space	2.1	4.3	23.9	34.5	35.1
Laboratories	6	1.1	14	41	43.2
Lecture/tutorial facilities overall	3	5	12.2	43.1	43.9
Computer facilities	5	1.8	11.7	35.1	50.9

Importance: VS=very slight, S=slight, M=moderate, G=great, VG=very great

The above examples are random and inconclusive and, alone, say little about organisational performance.

Performance indicators in context

Measurement and evaluation of library performance has been widely canvassed in the literature. For those seeking the most up-to-date assessment of performance measurement in Australian university libraries, the single most useful tool is the report of a DETYA EIP Project (Wilson 1999) and the Best Practice Handbook (Wilson & Pitman 1999), developed as an outcome of this project. (Note: the Council of Australian University Librarians intends to keep this groundbreaking work up to date through the

development of a performance indicator website which will enable practitioners to share data and methodologies). As demonstrated by the EIP Project Team's research, performance indicators and the application of benchmarking methodologies are the most commonly used tools for measuring performance. The most important consideration in selecting performance indicators is that they will enable you to measure what is critical to success in your environment. To quote from the Best Practice Handbook:

To be effective, performance indicators must be developed in context, not isolation. They must be firmly rooted within a strategic management and planning framework (Wilson 1999 p B3).

The framework we have used since 1994 at Wollongong is the Australian Quality Council's *Australian Business Excellence Framework*. The introduction to the Framework states: *This is Australia's Framework for innovation, improvement and long-term success, applicable to all organisations, large and small, private and public, whatever their purpose (AQC 2000 p1).*

A large claim. However, in applying the principles underpinning the Framework over six years, I am able to affirm that the claims are not exaggerated and that the Framework has provided a solid foundation for the recognised success of the UoW Library.

It has been statistically proven that the organisations that live by these principles demonstrate improved performance over the long term and provide examples of how creating best practices across the whole management system enhances positive outcomes for the whole organisation, all of its stakeholders and its society (AQC 2000 p5).

Research underpinning this claim includes that conducted by Alexander Hausner, a postgraduate student of the University of Wollongong. Hausner's aim was to *find whether quantitative evidence exists to link the Australian Business Excellence Framework (ABEF) with business outcomes*. His research involved 22 manufacturing companies across a range of 13 different industry sectors, all of which had participated in the Australian Quality Awards for Business Excellence. Hausner's results included the following:

The findings show a direct link between performance in the Awards and annual improvement in bottom line results. (Hausner 1999, p 1).

Financial performance was not the only area of excellent performance:

Management aspects such as senior executive leadership, analysis and use of data and information measures of success and planning processes were found to be of particular importance.

It is concluded that striving for improvements against the ABEF is therefore in the interest of all stakeholders of an enterprise particularly the business owner and/or shareholder (Hausner 1999 p iv).

Development of performance indicators

If one accepts, from all of the above, that a measurement framework is desirable in improving and demonstrating organisational performance, then the choice of indicators and accompanying measures, which are valid, reliable and efficient to administer, remains a challenging process.

- performance measurement is fundamentally multidimensional in nature. A library or

information service that wishes to really understand how it is performing will examine both its environment and its constituencies - (Cullen 1999 p 26).

At Wollongong, environmental analysis (through scenario development, SWOT analysis, professional reading and networks) has enabled us to develop Critical Success Factors - those key areas in which satisfactory results are essential to successful performance.

We have also determined the expectations of library services of our various stakeholders (through surveys, focus groups, discussions). Our broad long term goals are derived from stakeholder expectations, from predictions about how expectations may change in future, analysis of opportunities in the professional and higher education environments, and from our own values and aspirations.

Together, the goals, critical success factors and stakeholder needs and expectations provide a basis for developing a system of measurement. These factors have been incorporated into a model known as a *Performance Indicator Framework* which links performance indicators and measures to each of the aforementioned elements.

Stakeholders	Expectations and Critical Success Factors	Performance Indicators
University Executive	leadership, cost efficiency; satisfaction of scholarly information needs, a model operation of quality processes.	Leadership effectiveness, Effective budget utilisation, Client/stakeholder satisfaction, Bookvote use, benchmarking, external evaluation
Clients	service excellence, flexible modes of access to resources and facilities to enable achievement of research, teaching and learning objectives.	Collection relevance, Access to resources, Information Literacy level, Facilities use, Client satisfaction, Bookvote use
Staff	a safe and pleasant workplace, opportunity for career development, job security and empowerment in decision-making	Leadership effectiveness, Staff development effectiveness, Staff satisfaction, Communication success, Skill levels, Workplace health and safety
Suppliers	mutual understanding of requirements; the development of innovative supply solutions, timely supply of goods and services	Supplier performance, Partnerships
Community	authoritative information resource, satisfaction of information needs, collaborative partnerships as well as the effective management of resources	Access to research resources, Community partnerships

The framework incorporates both *lead* and *lag* indicators. *Lag* indicators enable measurement of goal achievement and evaluation of success or assessment of benefits provided over a period of time. *Lead* indicators are used to measure process, operational

performance and patterns of usage; to provide ongoing feedback and thus alert managers early to changes or unexpected variations. An example of a lag indicator is *client satisfaction* whereas a lead indicator may be *client feedback incidents*.

All indicators at the UoW Library are designed to contribute to the evaluation of organisational performance through a single Key Performance Indicator: *Client and Stakeholder Satisfaction*.

Performance indicators should be regularly reviewed, developed and refined as new sources of data emerge, collection and analysis methodologies improve and the processes or performance to be evaluated change. Moreover, client and stakeholder expectations of library services are constantly evolving in a dynamic environment and perceptions of value should be regularly surveyed to maintain alignment with internal operations and service priorities.

Value

The question remains whether measures of organisational performance, strategic importance and stakeholder satisfaction can be aggregated to determine whether library and information services are of value to their clients. As mentioned in the introduction (above), it is difficult to measure the actual value of information with accuracy or objectivity. The question of value measurement is discussed extensively in a 1991 study by Broadbent and Lofgren who make the following points:

Libraries support research and education which in themselves are difficult to assign precise economic value. (Broadbent 1991 p 96).

In attempting objective measurements of the actual effect of information on performance, it is difficult to define and assess the impact of all the other variables which will affect the outcome.

A library service may be a necessary prerequisite for the operation of a research department, but it is not likely to be possible to define the precise contribution of the library to research results (ibid p 98).

When the real impact of an information system cannot be measured, the perceived value may have to be accepted as a proxy. The perceived value approach is based on the subjective evaluation by users and presumes that users can recognise the benefits derived from an information service ... (ibid p 98).

Acceptance of this position underpins our decision at Wollongong to adopt the one Key Performance Indicator of *Client and Stakeholder Satisfaction*. Measures, which include surveys, feedback incidents, timeliness, responsiveness and so on, are essentially measures of perception. Although research continues on identifying indicators which are objective and able to withstand academic scrutiny, there is a danger that the development, administration and interpretation of these indicators will be too time-consuming to be justified in an environment of resource constraints, and in which flexibility and change agility may be the key determinants of future sustainability.

Agreement on the nature and purpose of performance indicators and the development of common instruments for measurement is also a prerequisite for the development of national standards or benchmarks.

Benchmarking

A system of regular internal measurement provides the information needed for benchmarking. Benchmarking has many definitions and many purposes. It is primarily a tool for learning and improvement. For organisations which aspire to excellence or best practice, then benchmarking is a means of testing achievements, services and processes against those of other organisations.

Benchmarking thus needs not only to identify successes to date but also vital signs of adaptation to the future. A university's dynamism is as important as its current achievements, indeed probably a better guide to its future performance McKinnon 2000 p 3).

The Library profession is not lacking in data nor in performance indicators and measures. It does, however, lack clear benchmarks which can be used by libraries to identify best practice, to constantly learn from each other and thus add value for their clients and to progressively improve the performance of all libraries and enhance their standing and recognition in the community. The recently published manual *Benchmarking: a manual for Australian universities* identifies benchmarks for all key areas of the University. The chapter on Library and Information Services is premised on the need to identify benchmarks which will assess *Efficient use of resources and the quality of contributions to realisation of the university's objectives* . . . (McKinnon 2000 p 115). Most of the benchmarks are *criterion reference* benchmarks, that is, they identify the attributes of good practice and can be used primarily for internal evaluation. To determine best practice, quantitative, comparable information would also be needed.

Benchmarking is also available to those libraries whose parent institution are members of the Commonwealth Higher Education Management Services (CHEMS) or Universitas 21, however, participation is limited to members and the benchmarks are not widely available.

Those libraries participating in AOC Benchmarking networks are able to benchmark against network members - almost invariably non-library organisations - which in no way diminishes their usefulness but does not replace the need for specific library-related benchmarks.

In conclusion, for reasons of both political necessity and future sustainability, as well as the need and desire of managers to know how their organisation is performing and whether library services are meeting the needs of clients and stakeholders in a timely, efficient and effective manner, performance measurement and benchmarking are essential tools. Benchmarking should not be construed as a competitive activity amongst libraries, rather as a means of identifying *best practice* and of continuously improving all aspects of performance. As a means of demonstrating competitiveness against *non-library* information providers, however, benchmarks could be extremely useful for libraries as they increasingly operate in an environment which is global in perspective and which is attracting potential competitors seeking to profit from the delivery of online education.

Performance measurement is a highly political activity and must be seen as such, at the macro or micro level. We must look outwards to social and political expectations made of our institutions and ensure that they meet the needs and expectations of our significant client or stakeholder groups; we must use our planning and goal-setting activities in a meaningful way, incorporating appropriate measures, to demonstrate our response to this external environment, and our willingness to align our aspirations to broader corporate goals. But we must also look within and seek to promote an organisational culture which acknowledges the political nature of measurement. This means using performance measurement to:

- *Indicate the library or information service's alignment with broader organisational goals;*
 - *Demonstrate the integration of information services with the key activities of the organisation, or of the community;*
 - *Support the library's position as the organisation's primary information manager and service provider (Cullen 1999 p 25).*
-

REFERENCES

Australian Quality Council (1999) *Australian Business Excellence Framework 2000*, Sydney, AQC.

Brewer, Chris (1999) 'Longitudinal study of an information literacy program at the University of Wollongong', in *Concept, challenge, conundrum: from library skills to information literacy: fourth National Information Literacy Conference*, Adelaide.

Broadbent, Marianne & Lofgren, Hans (1991) *Priorities, Performance and Benefits: An Exploratory Study of Library and Information Units*, Melbourne: Centre for International Research on Communication and Information Technologies & Australian Council of Libraries and Information Services.

Cullen, Rowena (1999) 'Does performance measurement improve organisational effectiveness? A postmodern analysis', *Performance Measurement and Metrics*, vol.1, no.1, August, pp 9-30.

McKinnon, K. R. (2000) *Benchmarking: a manual for Australian universities*, Canberra: Dept. of Education, Training and Youth Affairs, Higher Education Division.

Temmerman, N., & Wright, L., (2000). 'Approaches to integrating tertiary literacies into curricula at the University of Wollongong', in selected papers from the inaugural *Lifelong Learning Conference*, pp70-75, 17th -19th July, Yeppoon, Queensland, Australia.

Wilson, Anne et al. (1999) *Guidelines for the Application of Best Practice in Australian University Libraries: Intranational and International Benchmarks*, Canberra: Dept. of Education, Training and Youth Affairs (not yet published).

Wilson, Anne & Pitman, Leeanne (1999) *Best Practice Handbook for Australian University Libraries*, (unpublished).