

Quality Frameworks

Reflections from Australian Universities

Edited by Jeanette Baird

AUSTRALIAN UNIVERSITIES QUALITY AGENCY



AUQA Occasional Publications Series

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Contents

PREFACE.....	7
BIOGRAPHIES	11
1 Quality Frameworks for Institutions,	
<i>David Woodhouse</i>	13
Background to quality frameworks.....	13
Terminology	13
<i>A caveat</i>	14
Scope of a quality framework	14
Relationships among the scope factors	16
Method for a quality framework	16
ADRI	16
Principles/processes for an higher education institution	18
Conclusions	19
Appendix A	20
2 Quality Frameworks: An Overview from AUQA Audit Reports,	
<i>Jeanette Baird</i>	21
Introduction	21
Use of ISO 9001:2000 as a higher education quality framework	22
Business excellence frameworks	23
Balanced Scorecard®	24
The ADRI method and CQI cycle: tool or framework?	25
Augmented ADRI and internally developed quality assurance systems.....	26
Institutional planning and review processes as quality frameworks	27
Audit report commendations and recommendations	29
<i>Audit report commendations</i>	29
<i>Audit report recommendations</i>	30
Audit progress reports	30
Discussion and conclusions	31
3 The End of the Affair: Reflections on ISO 9001 and RMIT University,	
<i>Robyn Adams</i>	37
Introduction	37
Background	37
The ISO Standards	38
Implementation of ISO at RMIT	39

Benefits of ISO certification	40
<i>Continuous improvement</i>	40
<i>Validation and identification of strengths</i>	41
<i>Evidencing and monitoring outcomes</i>	41
<i>Tendering processes</i>	42
<i>Marketing and reputation</i>	42
Challenges	42
The University's changing environment	43
Rethinking ISO certification	44
Conclusion	45
4 The Evolution of Quality at Edith Cowan University,	
<i>Susan King & Alison Thair</i>	47
Introduction	47
ECU quality framework	47
Quality model	47
Impetus for quality	47
Guided Self-Assessments	48
Adapting and adopting quality	50
Strategies for quality	50
Academic Board	50
Training	50
Planning	50
Reviews	51
Towards excellence	52
Quality@ECU	52
Embedding quality	52
Professional development partnerships	53
Key Performance Indicators	53
Benchmarking	53
Improvements to review processes	54
Outcomes	54
TABLE 1: TRANSLATING THE ABE FRAMEWORK FOR ECU	
(ECU ANNUAL REVIEW GUIDELINES 2001)	55
TABLE 2: ECU QUALITY PRINCIPLES AND AUQA PERFORMANCE PORTFOLIO STRUCTURE	56
5 Quality Assurance: Imposition of a Discourse or Sound Academic	
Practice?, Robin McTaggart	57
Introduction	57
James Cook University (JCU): background	58
Current situation	58
The context for quality assurance	59

Rhetoric leads reality	60
<i>Adding another discourse?</i>	61
<i>Some rhetorical precursors</i>	61
RESEARCH AND RESEARCH TRAINING MANAGEMENT PLAN	61
<i>Teaching and learning plan</i>	63
The philosophy of the quality assurance system.....	64
<i>Quality as ‘fitness for purpose’</i>	64
<i>Quality of purpose</i>	65
<i>Purposes of stakeholders</i>	65
<i>Policy for a Quality Assurance System</i>	65
BASIC PRINCIPLES OF ACADEMIC QUALITY ASSURANCE	65
<i>Fundamentals of the method of academic quality assurance</i>	66
<i>Objectives and performance indicators</i>	67
<i>Convergence</i>	67
<i>Gaps</i>	69
<i>Enculturation or compliance</i>	69
6 Quality Assurance at the University of Sydney,	
<i>Ann Brewer</i>	71
Overview.....	71
Introduction.....	71
Quality assurance framework.....	72
Case-study methodology	73
Quality movement	74
Consultation with students and staff.....	75
<i>Case analysis</i>	76
ENSURING KNOWLEDGE TRANSFER FROM STAFF AND STUDENTS	76
TIMING OF MEASUREMENT IS AN IMPORTANT CONSIDERATION	77
RETHINKING STUDENT EVALUATION	77
PERFORMANCE MEASUREMENT	77
GUARANTEEING STAFF ENGAGEMENT	78
NORMATIVE MATCH BETWEEN UNIVERSITY VALUES AND QUALITY	78
COMMUNICATING THE PROCESS	79
QUALITY AS UNIVERSITY POLICY	79
Conclusion and lessons learned	79
APPENDIX	83
NOTES.....	85
REFERENCES	87

PREFACE

What do we understand by a ‘quality framework’? Is the term synonymous with ‘quality management system’? Is it used to mean a methodology or a particular quality improvement tool? At the system level, in Australia, the term ‘framework’ is applied in varying ways to higher education quality assurance:

- the Australian Qualifications Framework (AQF) is a categorisation of educational awards
- the Research Quality Framework currently under development is a method and process for assessing research outcomes
- the Australian Higher Education Quality Assurance Framework ‘describes the role of the Commonwealth, Australian States and Territories, the AQF and AUQA in quality assurance in Australian higher education’ (DEST 2006).

This publication does not attempt to further deconstruct these uses at the national level but focuses instead on the development and application of quality frameworks by individual higher education providers.

Members of the AUQA Board suggested the theme, recognising a comparative lack of analysis and advice on the ways in which quality frameworks could be implemented by higher education organisations. When the suggestion was first made, the Board indicated an interest in AUQA developing a quality framework for the benefit of the Australian higher education sector. Further reflection suggested that a more fruitful approach would be to showcase Australian universities’ experiences in developing, adapting or using quality frameworks, as a source of reflection for higher education quality practitioners in Australia and internationally. The case studies in this volume highlight the diversity of Australian higher education institutions and their approaches to quality assurance.

For several decades there have been numerous attempts to develop quality structures, models or frameworks to assist organisations in their pursuit of quality. Among these are the International Organization for Standardization standards and business excellence models, and other resources such as the Balanced Scorecard. None of these approaches were specifically developed for use by higher education organisations, although they have been applied to varying extents and in varying ways within educational settings. Some aspects of university operations readily lend themselves to the application of business quality frameworks but the processes for learning and research do not always do so.

As a result, universities have had to consider how to integrate the discourse and ‘apparatus’ of quality assurance and enhancement with the practices of higher education. After all, universities routinely apply quality assurance methods in their activities, especially in regard to academic standards, and excellence is the yardstick of academic research. However, commentators routinely lament the extent to which the introduction — some would say the imposition — of ‘quality’ concepts has taken place in such a way as to emphasise the gap between these concepts and academics’ traditional understanding of quality assurance. Such concerns perhaps overestimate the extent to which discursive practices of negotiation can produce a consensus around broad principles.

In chapter one, David Woodhouse tackles the question of what we mean when we talk about an institutional quality framework for higher education. He describes the elements of a comprehensive organisational framework in a way that will assist institutions in the systematic consideration of quality improvement.

In chapter two, I provide an analysis of quality frameworks applied by Australian universities and self-accrediting institutions, as described in AUQA audit reports to April 2006. My provisional conclusion is of a gradual movement away from the use of 'full-blown' business quality frameworks towards a more embedded approach centred on university strategic planning and review processes. This chapter also provides a context for the case studies that follow.

Chapter three offers the first of two case studies describing the experiences of Australian universities in applying well-known business models of quality. In this chapter, Robyn Adams charts the introduction of ISO9001 certification at Royal Melbourne Institute of Technology, the various issues and challenges that were confronted, and reasons for an eventual decision to not seek re-certification.

In chapter four, Susan King and Alison Thair describe the evolution of a quality assurance system at Edith Cowan University through engagement with the Australian Business Excellence Framework. Their chapter demonstrates a productive engagement between business concepts of organisational excellence and universities, provided there is scope for adaptation to local circumstances.

The next two case studies provide reflections on quality frameworks evolved from existing institutional systems. A theme of both is the tension between managerial and academic values and the processes through which institutions accommodate multiple value sets.

In chapter five, Robin McTaggart offers an analysis drawn from his interest in social practices. He describes the adoption by James Cook University of a quality framework which, in the light of a changing external environment, has built on previous academic quality assurance and control processes.

In chapter six, Anne Brewer examines the negotiation of an agreed quality model at the University of Sydney. Through an emergent process involving collaborative knowledge networks, mutual adjustment of understandings can occur.

The Appendix provides some website references for quality frameworks and related topics.

Most of the analysis is of Australian universities but the findings are relevant to a wider audience, including non-university higher education providers. In Australia, many non-university providers are exploring the use of quality frameworks, as they prepare for audits under the Australian Government's *Higher Education Support Act 2003* and, in some cases, a possible transition to self-accrediting status under revised National Protocols for Higher Education Approval Processes.

AUQA does not endorse any particular quality frameworks for higher education, whether they be generic business frameworks or specific institutional systems, although AUQA's Approach-Deploy-Results-Improvement (ADRI) quality cycle is found in many generic business quality models. This publication provides information on some quality frameworks potentially available to higher education providers. More importantly, I hope it will promote ongoing discussion among those keenly interested in quality improvement in higher education.

All chapters in this publication were independently refereed through a double-blind peer-review process.

I would like to extend sincere thanks to Magnolia Flora for her invaluable editorial assistance and for designing and typesetting this publication. AUQA is of course most grateful to the contributors, who so willingly have shared their insights.

We welcome feedback on this publication.

Jeanette Baird

Series Editor

AUQA Occasional Publications

BIOGRAPHIES

Ms Robyn Adams

Robyn has been an Audit Director at AUQA since February 2006, and is on secondment from RMIT University, where she holds the position of Principal Consultant, Quality. Robyn has senior management experience across a range of areas, including human resource management, industrial relations, strategic planning and quality management and has worked in the tertiary education sector for over 15 years. She has particular expertise in the design, development and implementation of organisational-wide systems and processes to achieve business objectives and facilitate quality enhancement and has been a member of the Joint Steering Committee for AUQF.

Dr Jeanette Baird

Dr Jeanette Baird has been an Audit Director at AUQA since early 2005. She has a background in higher education and public sector management, having worked at several Australian universities and in the Commonwealth and Australian health departments, as well as at the Australian National Audit Office. She has published on such topics as university governance and performance measurement and has presented workshops on higher education quality assurance both nationally and internationally.

Professor Ann Brewer

Professor Brewer is the Deputy Vice Chancellor (Infrastructure) responsible for developing, managing, sustaining and renewing the organisation's capability through its staffing and EEO strategies, information and communication technology, campus properties and services at the University of Sydney. In this role, Professor Brewer has been engaging with academic and professional staff to ensure that research, learning, teaching and community strategies are aligned to world class standards in a fit-for-purpose environment. She is also attempting to meet the challenge of ensuring the University's capability continues to strengthen through innovative approaches to delivering staff services. She has held a number of senior appointments at the University of Sydney including in 1998, the appointment as Foundation Professor of Organisational Logistics. She has published in leading international journals in her field and authored six books on organisational change, managing organisations and employee commitment.

Dr Susan King

As Executive Director, Governance, Policy and Planning at Edith Cowan University (ECU), Dr Susan King has helped shape strategic planning, governance, performance monitoring and quality assurance processes at ECU, including preparations for its Australian Universities Quality Agency audit. This work follows policy and resource management roles in public sector departments at both federal and state levels.

Professor Robin McTaggart

Professor Robin McTaggart is Pro Vice-Chancellor Student Services and Quality Assurance and Chair of the Academic Board at James Cook University. He is interested in curriculum and teaching, cross-cultural pedagogy and research, democratic and case study approaches to program evaluation and participatory action research in education, management and other professions. He has published widely across these fields. Prior to his appointment as Pro-Vice-Chancellor at James Cook University, he was Executive Dean of Law and Education (1998) and Executive Dean of Education and Indigenous Studies (1999). Immediately before moving to northern Queensland he was Director of International Programs in the Faculty of Education at Deakin University Geelong and was Head of the School of Administration and Curriculum Studies at Deakin University from 1993–1995. He is also Adjunct Professor in the International Graduate School of Management of the University of South Australia.

Ms Alison Thair

As Manager, Equity and Quality at Edith Cowan University, Ms Thair provides operational and strategic advice to further develop, communicate and embed ECU's quality approach and culture. This role at ECU builds upon Alison's previous management and quality expertise in the higher education and professional services sectors.

Dr David Woodhouse

David Woodhouse is founding Executive Director of AUQA, which since 2001 has been responsible for auditing the academic quality assurance procedures of Australia's universities and state accreditation agencies. AUQA also has a responsibility for quality improvement, which it carries out through publications, workshops and consulting. David undertakes many national and international quality assurance activities, providing advice and training on educational quality assurance to governments, agencies and institutions in a number of countries. He is an Executive editor of the journal *Quality in Higher Education*, evaluator for the Business Excellence Awards, and a reviewer for the Internationalisation Quality Review program of the OECD and European University Association. He has served two terms as President of the International Network of Quality Assurance Agencies in Higher Education.

Quality Frameworks for Institutions

David Woodhouse

Background to quality frameworks

What is meant by a ‘quality framework’? To answer this question, it is first necessary to define the term ‘quality’ itself. This paper uses the most common definition, namely ‘fitness for purpose’ (FFP). In terms of this definition, achieving quality requires a cyclic approach: actions lead to results which are compared with the initially stated purposes. These cycles are often called ‘quality loops’, and consistently achieving quality requires a systematic approach to implementing the quality loops.

Over the last 50 years there have been many attempts to devise structures that will help organisations to configure their quality assurance activities to facilitate assessment and improvement, and hence achieve high quality. The best known of these are the ISO 9000 series of standards; the various systems referred to as ‘Total Quality Management’; the quality awards (most notably the US Malcolm Baldrige National Quality Award and in Australia the Australian Business Excellence Framework); and more recently the Balanced Scorecard[®]. They have common features and approaches but different emphases. None of these was developed specifically for educational institutions, although such organisations can benefit from judicious use of some of the approaches and concepts. Baldrige and ISO 9000 have been adapted to specific areas, such as education or other service activities. However, these variants call into question the intended comprehensive nature of the respective structures; also it is possible that the system could become too complex. It is hard to know when to stop proliferating variants of the basic structures, and if there are many such variants it is difficult to decide which is most appropriate for any given organisation.

These ‘quality structures are often called ‘quality frameworks’. This paper proposes a way of thinking about quality frameworks, while acknowledging that the term is often used very loosely.

Terminology

A **quality framework** comprises:

- a specification of **Scope** (e.g. research, teaching, governance, staff support, etc.)
- specification of the coherent **Inter-relation** of these factors

- for each factor in the scope, a specification of the nature and implementation of the ‘quality loops’ (**Method**)
- **Principles/Processes.**

The Baldrige Award and ISO 9000 probably satisfy this definition in full. The Research Quality Framework (RQF) and the Australian Quality Training Framework (AQTF) consist primarily of a Scope plus outcome indicators in the Scope areas, and (in the latter case) standards to be reached in terms of those indicators.

A **quality management system** is a systematic approach to managing quality in a specific organisation. It comprises:

- a statement of the organisation’s approach to managing for quality
- a scope
- for each factor in the scope, a specification of the structures and procedures intended to achieve quality (e.g. details of membership, terms of reference, reporting lines for all committees; responsibilities; personnel; etc.)
- specification of the overarching coordination of these structures.

Any organisation’s QMS can be based on a particular general quality framework, and would embed and link the ‘quality loops’.

A **quality system** is a set of related or interacting ideas, processes or components for the achievement of quality. Thus it includes QMSs and QFs, both institutional and sectoral. At a sectoral level, it may be called a ‘quality assurance system’.

A caveat

It is important to remember that quality frameworks (and the other structures mentioned in this section) are not intended to be straitjackets. Organisations consist of people and therefore they are complex and inconsistent, whereas the point of a quality framework is that it provides a coherent and consistent way of thinking about the organisation. Whatever framework is chosen, therefore, it is unlikely that everything will fit neatly into it. To paraphrase Carl Jung: It is easy to draw boxes but not easy to fit people into them. The quality framework should be used to guide the thinking and acting and planning, but if some aspects of the system fall outside the requirements of the framework for good reason, this should be accepted.

Scope of a quality framework

The Baldrige criteria identify seven factors that cover the sweep of organisational activities. An analogous set of factors that cover the scope of higher education might look as follows:

1. Organisational leadership

- organisational overview
- governance
- management system
- strategic planning and review
- policy management
- QMS.

2. Education (teaching & learning)

- education strategy
- program design, monitoring, revision
- learning
- teaching, assessment
- this factor links to partnering arrangements, internationalisation, flexible delivery and distance delivery.

3. Research

- research strategy and management
- coordination, support and evaluation of research
- commercialisation
- postgraduate student management and training
- research–teaching nexus
- this factor links to partnering arrangements and commercialisation.

4. Other Contributions to Society / Community Service

- good citizenship
- professional work
- administration/management
- community service
- applications of research
- Indigenous and international links.

5. Staffing

- staff management systems and staff support services
- staff planning, appointment, mentoring, appraisal, development.

6. Enabling Services

- knowing students, student management systems and student support services
- financial management
- marketing, public relations.

7. Facilities

- library, information technology services, information systems
- physical resource management
- physical facilities, laboratory provision.

One could argue that a ‘scope’ should be homogeneous, or ‘on the same level’. However, items 2, 3 and 4 are the activities for which the organisation exists, while the purpose of the other items is to support these activities, embedded within the quality framework.

Relationships among the scope factors

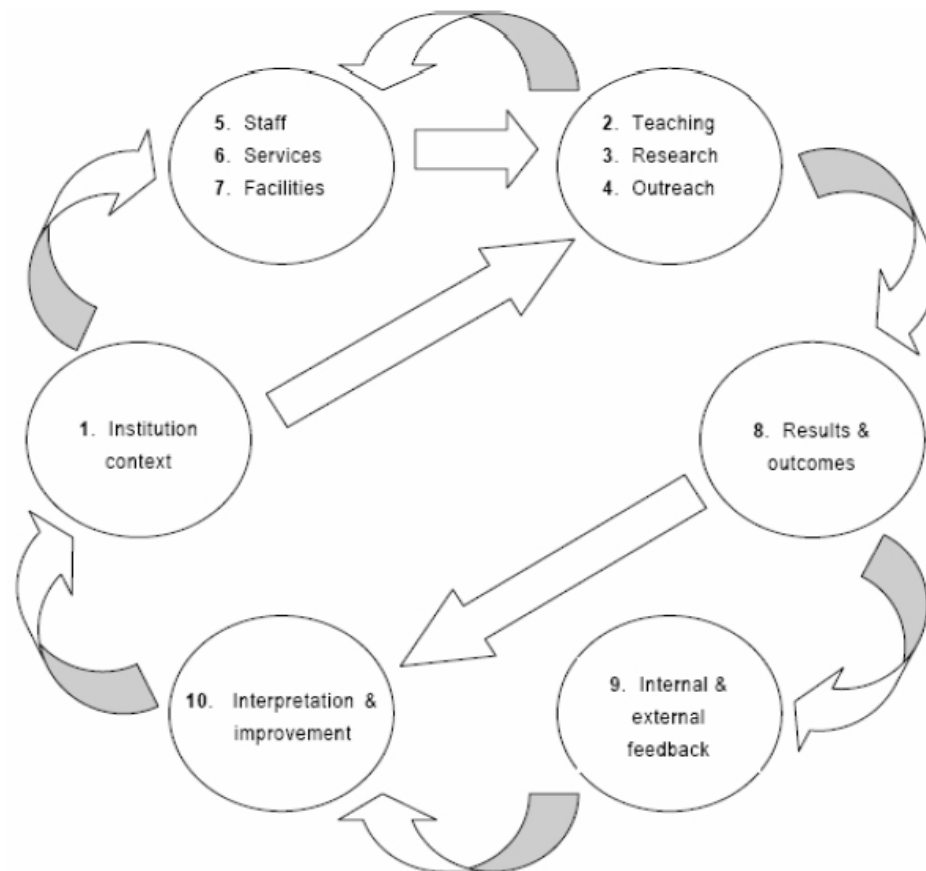
The above areas listed under ‘scope’ have a sequential, cyclic relationship, as indicated in the flow chart, Figure 1., below¹, which shows the iterative relations between these areas.

For completeness and clarity, Figure 1. also includes other relevant aspects.

Other approaches to relating the factors in the framework scope include the Baldrige/ Business Excellence Structures. Also, Boyer’s four scholarships offer a categorisation of the main factors in the scope.

All approaches, however, tell only part of the story.

Figure 1. Quality loops



Method for a quality framework

ADRI

The various quality award criteria identify a number of steps to be used in applying a quality framework. Originally termed a ‘plan, do, check, act’ cycle, the most common terms are now ‘Approach, Deployment, Results’, and ‘Improvement’ (ADRI). ADRI is one way of thinking about ‘quality loops’.

As quality is fitness for purpose, the starting point is an organisation’s mission, vision and values through to more specific goals and **Objectives**. The **Approach** to achieving these is set out in policies and procedures, and specifications of organisational structures designed to

achieve the objectives. **Deployment** is how the approach is being put into effect, and includes steps taken to ensure staff understand the approach and are properly prepared to carry it out. It also includes the provision of the necessary resources and facilities.

Results are the consequence of the approach and deployment activities. Ideally, the results are the achievement of the objectives, but most commonly there is a gap between them. At this point it becomes essential to have had systematic processes for developing objectives, planning the approach and deploying it, as otherwise the organisation is unlikely to understand why it achieved those particular results. **Improvement** generally relates to any actions taken in consequence of analysing the results, including comparing them with the objectives. In general, the organisation may amend its objectives and/or its approach and/or its deployment, and then embark on 'the ADRI cycle' again. The 'scope' areas listed above are not entirely in a different dimension from the following 'steps', which are grouped under 'method'. We can elaborate these a little more for higher education institutions as follows:

For scope areas 2, 3, 4, the following steps are relevant (and in particular would be covered by an internal or external audit):

- goals / objectives
- approach
- deployment / implementation
- results (8): evidence relating to the outputs/outcomes set out in the mission and plans
- input/feedback (9): knowing internal and external stakeholders; getting input / feedback from them; reviews; accreditation; external checks
- interpretation (10), of results and feedback, related to objectives in the mission and plans.
- improvement actions (10)
- organisational learning.

The following table attempts to separate the scope and method more precisely.

Figure 2. Scope and methods

Scope →	Teaching & Learning (2)	Research (pure & applied) (3)	Outreach (community & professional service, internationalisation) (4)
Methods ↓			
Goals (1)			
Approach	This includes Staffing (5), Services (6) and Facilities (7)		
Deployment			
Monitoring (8)			
Results (8)			
Feedback (9)			
Interpretation (10)			
Action (10)			
Dissemination (1)			

Whether using the ADRI approach, or some other means of conceptualising and implementing the ‘quality loops’, there can be a tendency to use them for every process and every entity, no matter how small. The result can be unmanageable complexity due to the need to relate all these atoms to each other. As with the whole quality framework concept, the ADRI concept should be used only to the extent that it is useful. In the above table, it is likely that the organisation will wish to identify the quality loops in each of the shaded column areas. Furthermore, even though ‘staffing’ is within the approach and deployment aspects in relation to teaching and learning, it will have its own objectives related to aiding the organisation to meet its teaching and learning objectives. Therefore, it will probably be helpful to apply the ADRI concept to these objectives. However, taking it to yet another level may not be useful, except where there are clearly defined sub-processes (e.g. research training). (‘Results’ or ‘outputs’ are included as one of the seven scope factors in the Baldrige categorisation.)

Principles/processes for an higher education institution

In the field of quality management, various writers have attempted to distil the essential characteristics of an effective quality management system and as a consequence, some general principles have emerged, such as the need to ensure that senior managers are committed to the program, the importance of all staff being involved, and the need to monitor and manage processes to achieve quality.

The following list attempts to identify some principles of good practice in internal quality assurance systems within higher education institutions. Some of these characteristics are well grounded in evidence, while others are currently more intuitively based.

3. The Vice-Chancellor or CEO and other senior managers recognise that attention to quality is essential and central, and are **committed to quality** in a way that other staff see as collaboration, not an imposition.
4. The quality system combines **quality assurance and planning**. The core components of a quality system are effective processes, clear and precise descriptions of which must be widely available.
5. **Balance**. Quality and its assurance involve both professional and management functions. There is need for balance between the management and collegial emphases. The maintenance and improvement of quality require professional commitment in the context of well-designed systems and processes.
6. **Proximity**. The prime responsibility for academic quality is located as close as possible to the academic activities of teaching, learning, research and community service (but subject to broader coordination and monitoring).
7. **Feedback**. Quality assurance is a continuous, active and responsive process. Critical evaluation of performance and the actions that flow from this should be a regular and progressive feature of academic work.
8. The system is **evidence-based**. Data (‘indicators’) are collected, analysed, disseminated and used. This feedback loop, leading to the modification of ideas and activities and to active sharing and dissemination of good practice, is central to the proper operation of quality assurance systems. The indicators of effectiveness are the academic outcomes of the teaching, learning, research and community service activities.

9. **Standards.** Outcomes specifications make reference to standards of achievement, such as access rates or publication levels.
10. There is a **balance of central and local action** and responsibility. One possible example is that, if the institution has a central person or unit with responsibility for quality, the role might be explicitly identified as facilitative or supportive to stress that joint responsibility and avoid its being thought to have a replacement role. An analogy is that a staff development unit is recognised as being supportive of academics in their activities, not the body that does all the teaching, etc.
11. There is **positive support** for quality assurance activities, including funds as necessary.
12. The quality system encourages a '**double positive**' attitude: we are doing well but can do better.
13. The quality system has a **demonstrably positive effect** on the academic activities, and this effect is widely known and acknowledged.
14. The **centrality** of staff satisfaction and staff development are recognised, in the context of the institution's objectives.
15. The quality system permits, supports and provides a safety net for **risk-taking**.
16. **Externality.** Effective quality assurance in higher education requires the use of external academic and professional points of reference. An institution's academic work and its processes for guaranteeing the quality of that work must be responsive to the national and international contexts. The desires and needs of the full range of stakeholders are addressed, and their satisfaction monitored.
17. **External reference** is assisted by the involvement of the institution's staff in outside professional activities, and the use of external participants in the internal quality assurance processes.

In introducing and using these actions, an institution must consider the level of investment needed. Quality is not free, but the amount spent must be commensurate with the results and benefits obtained. Just as quality frameworks and the ADRI method should be used only to the extent that they are helpful, so the level of investment by an institution must be kept in proportion.

Conclusions

Higher education institutions generally have been highly professional and responsible, with staff committed to good teaching, good research, the welfare of students, and so on. Sometimes there has been complacency or insularity, and in those cases the institution needs to be challenged to show that it is operating successfully. A systematic way of thinking about quality will reveal where things are well and assist to rectify those that are not. Today, higher education institutions are facing (and contributing to) a rapidly changing environment, and this can also be addressed by adopting an overarching quality structure that may be adapted to the different aspects of the environment's demands on the institution.

Appendix A:

The following Principles underlie the Australian Business Excellence Framework:

1. Clear direction allows organisational alignment and a focus on the achievement of goals.
2. Mutually agreed plans translate organisational direction into action.
3. Understanding what customers value, now and in the future, influences organisation direction, strategy and action.
4. To improve the outcome, improve the system and its associated processes.
5. The potential of an organisation is realised through its people's enthusiasm, resourcefulness and participation.
6. Continual improvement and innovation depend on continual learning.
7. All people work in a system; outcomes are improved when people work on the system.
8. Effective use of facts, data and knowledge leads to improved decisions.
9. All systems and processes exhibit variability, which impacts on predictability and performance.
10. Organisations provide value to the community through their actions to ensure a clean, safe, fair and prosperous society.
11. Sustainability is determined by an organisation's ability to create and deliver value for all stakeholders.
12. Senior leadership's constant role modelling of each of these principles, and creating a supportive environment in which to live these principles, will help the organisation and its people to reach their potential.

Source: *Australian Business Excellence Framework 2000*, Australian Quality Council

Quality Frameworks: An Overview from AUQA Audit Reports

Jeanette Baird

Introduction

In this chapter, I present an overview and analysis of the quality frameworks used by Australian universities and other self-accrediting institutions (SAIs), as described in Australian Universities Quality Agency (AUQA) audit reports to April 2006, supplemented by audit progress reports and publicly available information.

As a picture of the entire Australian higher education sector, this analysis is partial. It focuses on universities, not all of which have been audited by AUQA. Moreover, my analysis does not necessarily reflect the current situation for each institution that has been audited, as the audit reports have progressively been issued since 2002. There may have been considerable evolution of an institution's approach to quality management following its audit report: existing quality frameworks may have been further developed or replaced. Nonetheless, this analysis serves to offer a broad picture of the ways in which Australian SAIs have tackled questions of quality assurance and quality improvement using more or less explicit management frameworks. Although the accounts in audit reports are at one remove from direct institutional experience, unlike the case studies included elsewhere in this volume, the audit reports serve to identify the reactions of the various audit panels to institutional efforts to define and consistently implement a quality framework.

The analysis is drawn from the following audit reports:

Year	Institution
2002	Curtin University of Technology, University of Southern Queensland, University of Ballarat, Australian Catholic University
2003	Newcastle University, Australian Maritime College, University of Adelaide, Swinburne University of Technology, University of Canberra, Macquarie University, University of Queensland, Southern Cross University, University of Notre Dame, Royal Melbourne Institute of Technology

2004	Griffith University, University of Western Australia, University of New England, University of South Australia, James Cook University, Edith Cowan University, Charles Sturt University, University of Sydney
2005	Bond University, Deakin University, La Trobe University, Queensland University of Technology, Charles Darwin University, University of Tasmania, Melbourne College of Divinity
2006	University of Melbourne, University of Wollongong, University of New South Wales, Central Queensland University

I do not attempt to examine why a particular institution has or has not chosen to adopt a particular quality framework, choosing instead to explore the diversity of approaches taken by Australian self-accrediting institutions. For this reason, I have not attempted to cover each SAI equally, but use examples to illustrate a point.

Not all institutional performance portfolios or AUQA audit reports specifically mention a quality framework, although the approach to quality assurance is always discussed in both portfolios and reports. The term ‘quality framework’ is used in a general sense by many Australian higher education institutions to refer to an institution’s overall approach to quality assurance, similar to the ways in which the phrase ‘quality management system’ (QMS) or ‘quality system’ is employed. The analysis below discusses institutional QMSs as well as quality frameworks.

AUQA audit reports which contain particular comments on the auditee’s use of a ‘quality framework’ (or the extent to which such a framework is present or absent across the institution) include: the University of Adelaide, Bond University, Charles Darwin University, Deakin University, Edith Cowan University, La Trobe University, University of New England, and the University of South Australia.

In the following sections of this chapter, I comment on the use of proprietary quality frameworks by Australian higher education institutions. Later sections consider frameworks developed internally by institutions, discuss commendations and recommendations from audit reports, and offer some general conclusions.

Use of ISO 9001:2000 as a higher education quality framework

ISO 9001 is a globally recognised quality standard (ISO 2006) and a number of universities around the world maintain whole-of-institution registration to ISO 9001, with some commentators arguing for an extension of its use in higher education (e.g. Peters 1999).

The range of educational institutions with ISO certification is ‘thought to be quite large, particularly in Asia’ (OBHE 2003) and includes Hanyang University in South Korea, St Paul University in the Philippines and Sripatum University in Thailand.

ISO 9001 certification is given following an external assessment and so is viewed generally as a ‘seal of approval’ for quality. Like other proprietary frameworks, ISO standards can be used internally by institutions. However, the third-party approval — and public proclamation of this as a form of accreditation — may be regarded by some institutions as the main outcome of use of a proprietary framework.

One example of ISO 9001 certification in Australian higher education is the Royal Melbourne Institute of Technology (RMIT) in the years 1998 to 2004, an extended discussion of which is contained in chapter three. Another example, also involving a dual-sector institution (i.e. one offering both higher education and vocational education and training qualifications) is that of the Australian Maritime College (AMC). Many industries including the maritime industry have relied on quality systems such as ISO. For some years AMC sought to align itself with the maritime industry through the use of internal quality processes that were congruent with an ISO compliance model (Cooper 2004). It is noticeable that the audit reports for both AMC and RMIT, issued in 2003 (AUQA 2003b and 2003c respectively), reported that ISO approaches were combined with other quality approaches and that the resulting mix was both complex and possibly confusing for staff. While these two institutions have now changed their approach at a whole-of-institution level, their experience is helpful for examining the development of quality frameworks within Australian higher education.

In another case, the 2005 Audit Report for Charles Darwin University noted that the institution had made a preliminary assessment of how its emerging quality management system met ISO 9001 standards, although no decision had been taken on the use of ISO standards for a University-wide approach (AUQA 2005a).

More commonly for Australian universities, ISO 9001 certification is obtained and used for a specific area within an organisation. These areas can include commercial arms and controlled entities, such as Wollongong University College and UniAdvice (University of Wollongong) and ACUcom (Australian Catholic University). Project-based consultancy services operated by universities appear to lend themselves to process-driven quality frameworks such as ISO. The University of South Australia's ISO 9001-certified Project Quality System for research projects is one example (AUQA 2004a), while AMC's commercial arm, AMC Search Limited, received a commendation from the AUQA audit panel for its quality system using ISO 9001 (AUQA 2003b). An ISO approach has been usefully employed by faculties and departments in some institutions (e.g. Curtin University of Technology) in relation to transnational education activities.

Within universities, a range of specific areas had obtained ISO 9001 registration at the time of audit, such as Information Technology Services at the University of Queensland (ISO 9001 and ISO 17799), a number of academic and service units at the University of Southern Queensland, and administrative divisions at Deakin University. Other areas within institutions were considering or pursuing ISO 9001 registration at the time of their AUQA audit, for example Facilities Management at the University of New South Wales.

Business excellence frameworks

Among the business excellence frameworks that have been applied to universities, in Australia and Europe respectively, are the Australian Business Excellence Framework (ABEF) and European Foundation for Quality Management (EFQM) Excellence Model[®]. A related business excellence model is the Singapore Quality Class (SQC) Business Excellence Framework.

These models, which are similar to the Malcolm Baldrige Awards in the US, use a continuous quality improvement cycle (see ADRI below), which is applied to a number of key principles

or areas of excellence. An example of the use of the quality principles of the ABEF is provided in the extended case study of Edith Cowan University in chapter four.

Several Australian universities have sought to incorporate business excellence principles within their own quality management systems. For example, the Quality Improvement Framework at the University of Ballarat is described in its 2002 Audit Report as being developed with reference to ABEF, the Malcolm Baldrige Education Criteria for Performance Excellence and the McKinnon-Walker Benchmarks (AUQA 2002a, p.18). In addition to ISO 9001 certification, RMIT's Quality Management System at the time of audit also included an 'RMIT Excellence Framework' (AUQA 2003c, p.19).

As with ISO 9001, particular units within a higher education institution may implement management frameworks using a business excellence model. One example is that of administrative divisions at Deakin University (AUQA 2005c), while the University of Wollongong Library has won an Australian Business Excellence Award, and the Singapore Campus of James Cook University aims to achieve Singapore Quality Class.

In the United Kingdom, the Consortium for Excellence in Higher Education has been established to evaluate the benefits of applying the European Foundation for Quality Management (EFQM) Excellence Model[®] to the higher education sector (Hides, Davies and Jackson 2004; CEHE 2006). The Consortium has established a Community of Practice for institutions using this Model for continuous quality improvement. The approach has been supported by the Quality Assurance Agency in the UK as a tool for self-assessment (Williams 2003). Institutions using the Model include Liverpool John Moores University and Sheffield Hallam University (Pupius 2003).

Balanced Scorecard[®]

The Balanced Scorecard[®] (BSC) is a management system designed around the use of measures that go beyond traditional financial measures of organisational performance. It draws from existing concepts of Total Quality Management (TQM) and a continuous quality improvement cycle, emphasising feedback from outcomes but also the need for innovation and growth through a process of 'strategy mapping'. Several universities in Australia have employed BSC explicitly or BSC concepts to review their overall performance, including RMIT and the University of Sydney, while others are exploring the use of a BSC model.

Curtin University of Technology has based its planning on a BSC model since 2000 using four interdependent themes: Curtin Culture, Core Activities, Students and Clients, and Financial Security. The 2002 AUQA audit found that the BSC model at Curtin, which has measures for achievements and innovations, was able to be clearly linked to University-wide plans, such as the University Teaching and Learning Plan (AUQA 2002b, p.18).

Bond University has used the BSC concept as a comprehensive organising framework that expresses the University's mission, vision, values and strategic plan in terms of specific actions and measures. The 2005 AUQA Audit Report noted that Bond had adopted the four headings of the commercial version of the BSC (Customer, Internal Business Processes, Innovation & Learning, and Financial) but suggested that the University could consider adapting these headings to the educational environment, to better specify domains and address some gaps (AUQA 2005b, pp.15–16).

The ADRI method and CQI cycle: tool or framework?

Many institutions state, at the time of audit, that they are using a continuous quality improvement (CQI) cycle as a quality framework. For some, as above, a CQI cycle is used as part of a proprietary quality framework. More frequently, however, the CQI cycle is expressed in terms very similar to the Approach-Deployment-Results-Improvement (ADRI) cycle used by AUQA as the basis for its audits (AUQA 2005d). Variations in nomenclature used by higher education institutions for this form of CQI include: Plan-Implement-Review-Improve or PIRI; Plan-Act-Review-Improve or PARI; Plan-Implement-Evaluate-Review or PIER; and Plan-Do-Results-Improve or PDRI.

The extent to which an ADRI model is elaborated and used as an explicit framework within an institution varies quite widely. Not surprisingly, many institutions use an ADRI model for the self-review process as presented in their audit performance portfolio, a few examples being Australian Maritime College, Charles Darwin University, Southern Cross University, Griffith University, University of Tasmania, and the University of Wollongong. Some of these institutions also state they are committed to embedding an ADRI loop across the institution, providing as evidence actions such as a regular cycle of external reviews.

It is questionable whether an ADRI cycle in itself provides a comprehensive quality framework for institutions, although it can be a very useful quality management tool.

In chapter one, it is suggested that both scope and processes should be specified, as well as a method, in a complete framework. That is, ADRI provides a method for reviewing and enhancing quality but does not prescribe the scope of activities for review or processes for a review. The following comment from the audit of the University of Tasmania echoes this opinion:

A critical aspect of a fully-articulated quality system is the allocation of primary management responsibility for the operation of all quality-related policies, and linking these to operational quality processes, and procedures. (AUQA 2005e, p.11)

At the time of an AUQA audit, the ADRI model is often new and not linked to wider institutional planning or review processes, although it is likely to have been used as an organising device for the purpose of the audit. However, as the following extract from the University of Wollongong Audit Report suggests, an audit panel or an auditee may find that the use of an ADRI model for institutional self-review process paves the way for a more comprehensive quality framework:

The opportunity now is to evolve that [self-review] process into a regular quality system for the institution's own continuous assurance and improvement purposes (AUQA 2006a, p.13).

The challenge for institutions is thus how to best use a CQI method in combination with established planning processes. At Queensland University of Technology (QUT) for example, 'it is QUT's philosophy of quality assurance that the Quality Improvement Cycle can be applied to all strategic priority areas and plans' (AUQA 2005f, p.11).

Augmented ADRI and internally developed quality assurance systems

Some Australian universities have developed their own quality assurance models and used these as their quality assurance framework. Two examples, one from a few years ago and one newly established, are provided by Swinburne University of Technology and the University of New South Wales (UNSW).

Swinburne University of Technology, which provides both higher education programs and vocational education and training (VET) programs, developed a comprehensive quality management system for its higher education operations in the 1990s, culminating in the implementation of the Swinburne Quality Review System (SQRS) in 2001.

At the time of the AUQA audit in 2002, SQRS was based on a set of 20 processes comprising standards and indicators of performance and guidelines for evidence to be considered, drawing on an ADRI model. Five processes were reviewed annually, with cross-functional, University-wide self-assessment teams formed to undertake each review. A comprehensive self-assessment toolkit was used by these teams. The next stage of development was to integrate SQRS with the University's planning and risk management processes, to provide an overarching planning and quality system. The audit panel commended Swinburne for 'its obvious commitment to achieving quality' but also for the efforts underway to integrate these various frameworks (AUQA 2003g, p.7).

The University of New South Wales has developed a Quality System which aims to capture, holistically, 'the dynamic and related collection of formal and informal processes, practices and cultural elements that enable us to achieve our strategic goals and ensure continual improvement in quality and performance' (UNSW 2006). It aims to embrace rather than subsume typical collegial processes and ways of interacting (cf. Srikanthan and Dalrymple 2002). The Quality System Map (see Figure 1. on page 27) aims to set out in schematic form the key quality assurance processes for each of the four areas of research, international, learning and teaching, and community, considered in terms both of 'enablers' (for example, governance, communication, culture) and a quality improvement cycle (plan, implementation, outcomes, improvement).

This quality system was at an early stage at the time of the AUQA audit in 2005, so it had not been systematically deployed or integrated with other processes. The Audit Report commented that staff at UNSW had found the Quality System Map helpful for learning about systems and processes at UNSW, while noting that the overall model ran the risk of being viewed as too diffuse and complex for practical application (AUQA 2006c, p.10).

In both these examples, the institutions were keen to embed quality within an established institutional culture and the practices of higher education. And, in the case of UNSW in particular, the university was conscious that the discourse of 'quality' can be alienating for many staff. As with succeeding chapters, these two internal quality frameworks demonstrate the extent of efforts that have been made in a range of institutions to develop a conceptually sound and coherent approach to quality that is sensitive to an educational environment.

Other institutions were also said to be developing their own elaborated quality assurance frameworks at the time of an AUQA audit. In 2004, the University of New England (UNE)

was developing UNE Quality Endorsement (UNEQE), which aimed to systematically incorporate quality assurance and improvement, risk management, business process improvement and occupational health and safety systems (AUQA 2004b, p.14). Central Queensland University had developed a Quality Management Framework (QMF) document, which ‘seeks to align the strategic objectives of the University with corresponding strategies, measurement systems, allocated responsibilities and associated organisational structures, policies and processes’ (AUQA 2006d, p.21).

Figure 1. UNSW Quality System Map

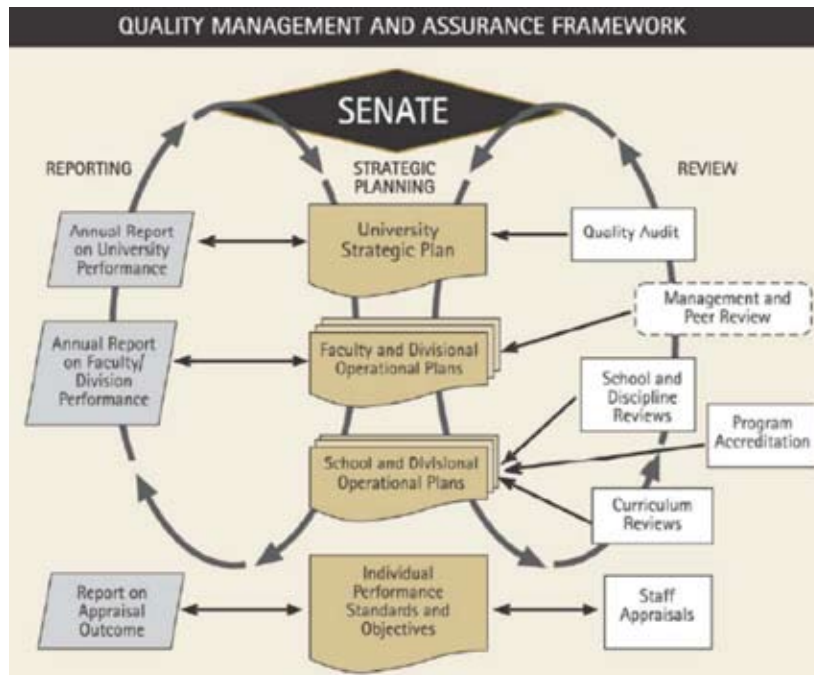


Institutional planning and review processes as quality frameworks

Many Australian higher education institutions use their planning, budget and review systems as their quality framework, as chapters five and six indicate. Deakin University provides a further example and is commended ‘for the implementation of an integrated planning and budget model that serves as a comprehensive quality framework and ensures that strategic priorities and operational targets are addressed at every level of the organisation’ (AUQA 2005c, p.11).

The University of Queensland’s quality management and assurance framework (University of Queensland 2006), as shown in Figure 2., relies on: the annual, rolling strategic planning process; annual reporting on performance against objectives in the strategic and operational plans; and periodic reviews.

Figure 2.



Similarly, the University of South Australia ‘has a comprehensive annual review and planning process that provides the framework for the quality system’ (AUQA 2004a, p.9). The University of Melbourne’s long-standing annual cycle of planning, quality assurance and reporting is available in a public document, *Ensuring Accountability*, while quality processes at the University of Canberra are stated to depend on the establishment of an integrated system involving: strategic planning; data analysis and feedback loop; achievement analyses; and resource allocation (AUQA 2003e, p.12). Other institutions make similar claims, as in this example: ‘Continuous quality improvement is embedded in the University’s planning, reporting, accountability and evaluation cycle’ (Deakin University 2006).

It should not be forgotten that stakeholder feedback is an important feature of any institutional quality framework. One feature of approaches commended in AUQA audit reports is the consistent generation and use of feedback from students, staff, employers and other key stakeholders as part of institutional planning and review processes.

The balance between devolution and centralisation of responsibility is one of the most contested elements in university management. Although overall strategic planning may be centrally managed, some Australian institutions explicitly offer a degree of autonomy at different levels in terms of quality management. The Audit Report for the Australian Catholic University (ACU) notes that the University aims to avoid ‘developing the processes for managing quality as a parallel stream of activity alongside strategic planning and review. To this end, all areas of ACU are required to develop and implement annual quality management plans’, which are embedded within the organisational unit’s strategic implementation plan (AUQA 2002c, p.23).

Audit report commendations and recommendations

Another way of approaching quality frameworks in Australian universities and self-accrediting institutions is to consider their use in practice, through an examination of those commendations and recommendations in AUQA audit reports that relate to an institution's overall approach to quality management and assurance. In this respect, there are examples of both commendations and recommendations, but no affirmations, in AUQA audit reports.

Audit Report Commendations

Commendations fall into several overlapping groups. The first group covers commendations for an institutional commitment to quality or to continuous improvement. For example, the University of Queensland was commended for 'exhibiting an embedded culture of quality, as shown by an awareness of and commitment to cycles of planning, supporting, measuring and, in particular, improving' (AUQA 2003f, p.18). Similarly, Macquarie University was commended 'for its commitment to improving as an organisation through, *inter alia*, regularly reviewing its practices' (AUQA 2003d, p.19).

For institutions that base their quality framework on their planning and review cycles, there are commendations for thorough and consistent use of strategic planning and monitoring that provides a CQI cycle. As an additional example to those provided above, the University of Melbourne was commended for 'its Planning and Accountability Cycle, which ensures the alignment of the University's objectives, strategies and targets throughout the University' (AUQA 2006b, p.9).

Several universities received commendations for their progress in developing and emphasising quality through specific frameworks, such as Swinburne University of Technology, mentioned above. The University of Canberra was commended for developing a Quality Assurance Framework and for the increased focus this was producing (AUQA 2003e, p.13), while the University of Notre Dame was commended for its commitment to a framework for continual improvement (AUQA 2003h, p.20).

A second group of commendations relates to the systematic use of monitoring performance by means of a Balanced Scorecard[®], for which both Bond University (AUQA 20005b) and Curtin University of Technology (AUQA 2002b) received commendations.

A third group is comprised of commendations for well-developed quality assurance systems in specific organisational areas and units, such as AMC Search Ltd (AUQA 2003b), the University of Wollongong Library (AUQA 2006a) and the Macquarie Graduate School of Management (AUQA 2003d). In some cases, these areas made use of proprietary quality assurance frameworks, such as ISO 9001. Several institutions received commendations for the commitment of their governing body to quality and quality improvement, such as the Council of Southern Cross University (AUQA 2003i), emphasising the application of institutional quality frameworks by the governing body.

Another, rather looser, group consists of commendations for robust quality assurance processes for learning and teaching, including a general commendation to the University of Queensland for its 'extensive attention to continuous quality improvement in many aspects of teaching and learning' (AUQA 2003e, p.27). Other examples include RMIT University,

which was commended for the attention given to the development of quality assurance systems for its teaching programs and for its Quality Assurance for Research Training (QART) process (AUQA 2003c, p.32). While these good practices for teaching and learning may be related to an overall institutional framework for quality assurance, it is likely that they have evolved from established internal systems, refined over many years.

Audit Report Recommendations

Recommendations relating to overall institutional quality assurance frameworks also can be grouped under some key themes. The first theme addresses institution-wide understanding of the framework that has been adopted for quality assurance and improvement. AUQA audit reports for several institutions have highlighted the need for a common understanding among staff of the institution's overall approach to quality assurance, including an understanding of the rationale and overall coherence of the internal quality system.

Adding to this are several recommendations that require institutions to systematically embed their quality management systems in institutional processes. These recommendations are often couched in terms of further development of the institution's espoused quality management system and, in particular, the importance of moving from the simple articulation of an ADRI model towards its active and visible use. Some recommendations include a comment on the desirability of ensuring that senior management positions with responsibility for quality are continued, to provide ongoing leadership, or that committees such as Academic Boards further develop their role in quality assurance. Other recommendations aim to ensure that student and staff feedback is taken into account, that feedback loops are closed in a timely manner, that quality processes are implemented consistently, and that more effective management information is available. A related theme concerns the integration between institutional quality management systems and strategic planning and reporting.

A further theme addresses the topic of harmonisation, integration and rationalisation of quality assurance and quality management systems. Issues identified by audit panels include the integration of disparate systems in devolved environments, the need to ensure that systems at different campuses work well together and a reduction in complexity and unnecessary variability. As an example, the 2006 Audit Report for Central Queensland University commented positively on the University's deliberate attempt to allow faculties to take ownership and control of their quality systems but noted that this had resulted in a confusing array of differing systems and that a common system might be more efficient (AUQA 2006d, p.21).

Audit progress reports

At the time of writing, follow-up progress reports were available for 18 institutions. Progress reports are produced against affirmations and recommendations in audit reports and, combined with public information from institutional websites, may assist in assessing the extent to which quality frameworks current at the time of audit have evolved or been replaced. Developments at RMIT, Edith Cowan University and James Cook University since the AUQA audit are discussed in chapters three, four and five respectively. Changes at other institutions include:

- the adoption by the University of Adelaide of an Institutional Planning and Performance Framework which, together with strategic planning processes, is operationalising the University's quality framework
- refinement of an overall approach to quality management and planning at the University of Ballarat
- an ongoing role for the Quality Management Committee at the Australian Catholic University, but with a greater emphasis on monitoring the implementation of strategic plans, coupled with examination of the 'culture of evidence'
- an explicit quality assurance role for the Academic Board at the University of Canberra but slower than anticipated progress in implementing the University's quality assurance framework
- a greater emphasis on integration of the quality system with the Planning Framework and use of a planning-implementing-measuring-review, reporting and improving (PIMRRI) quality cycle at Curtin University of Technology
- embedding quality management at Griffith University through a program of five-yearly reviews and improved quality assurance for courses and programs
- explicit explanation and documentation of the 'dynamic, interactive' quality assurance framework at Macquarie University (Macquarie University 2005)
- establishment of an Academic Quality Assurance Committee at Newcastle University and ongoing improvements to strategic planning
- simplifying and streamlining the Planning and Quality systems at Southern Cross University
- the adoption in mid-2005 of a new quality management system by Swinburne University of Technology, covering both its higher education and VET sectors and corporate service areas
- at the University of Southern Queensland, the further development of a Planning, Quality and Review Framework which includes improved use of management information, integration of different levels of planning, more focus on 'closing the loop' and the introduction of explicit University-wide Quality of Service Standards
- implementation of the University of Western Australia's Cycle of Planning and Accountability throughout faculties and schools.

Although each institution is different, some common themes emerge from the progress reports. These themes, which can be expected to broadly reflect the affirmations and recommendations in audit reports, include: organisational restructures and changes to areas of responsibility leading to greater or lesser emphasis on a quality management system *per se*; greater integration of quality management with institutional planning frameworks; more regular reviews, benchmarking, evidence-gathering and 'closing the loop'; and an emphasis on quality assurance of academic programs.

Discussion and conclusions

For universities, advice on the scope of a quality management system and standard questions for quality assurance has been available since the early 1990s (e.g. Piper 1993; Liston 1999).

This does not mean that a consistent quality framework is easy to achieve. Whatever quality framework is adopted, universities and other self-accrediting higher education institutions face a range of challenges in implementing whole-of-institution quality assurance. Some of these challenges rest on the specific production processes of higher education and the variety of outputs and outcomes (graduates, research, engagement) that are produced (Harvey and Knight 1996). Other challenges, which have been extensively discussed in the literature, lie in balancing competing conceptions of quality as ‘excellence’ and as ‘fitness for purpose’: the motivation of academics to achieve excellence in their own individual research and teaching sits uneasily with the systematic approach of an institutional fitness for purpose definition (cf. Harvey and Green 1993; Newton 2000).

A further issue for institutions is determining whether an approach that involves ‘certification’ (i.e. meeting threshold criteria) by an external agency is the most effective way to promote ongoing internal quality improvement. Consideration of external certification also involves an assessment of the extent to which the institution wishes to be seen to resemble others and of the reputational risk of a failure to achieve certification.

More practical challenges for those responsible for implementing a quality framework relate largely to the difficulties of embedding the approach and language of quality assurance. They include:

- articulating a methodical and coherent approach to quality assurance appropriate to the particular characteristics of higher education which has meaning at multiple organisational levels
- implementing a quality system that provides robust quality assurance rather than simply promoting ‘quality’ as an aspiration
- achieving an efficient system that supports ongoing improvement
- ensuring there is ownership and use of appropriate approaches throughout the institution.

From the description of the elements of a quality framework in chapter one, it is evident that most institutions audited by AUQA have taken the fairly straightforward step of specifying the scope of their quality system. One minor trend worth noting is the universal move towards defining the scope of a quality system as the whole institution, rather than learning and teaching processes. Although this definition of scope will have been influenced by AUQA’s whole-of-institution audit approach, it is consistent with the greater use by institutions of other comprehensive accountability and monitoring frameworks, for example risk management systems. Some complex questions remain, however, concerning the relationship between institutional quality frameworks and the quality systems of other bodies that are effectively controlled by the institution, although technically independent of it.

Most SAIs have adopted principles and processes to give visible effect to the importance they place on quality. Some Australian universities provide an explicit commitment to continuous quality improvement in high-level institutional statements, such as Swinburne’s Quality Policy Statement (Swinburne University of Technology 2006) or the following statements:

- ‘To achieve continuous quality improvement in the academic and executive management and administration of the University’ (University of Melbourne Strategic Plan, quoted in AUQA 2006b, p.36).

- ‘...a systematic and visible focus on continual improvement across the University...’
(University of New South Wales Values, quoted in AUQA 2006c, p.10).

Commitment can also be marked by the assignment of responsibility for quality to a member of the institution’s senior executive group, who is often supported by a ‘quality office’ and a ‘quality committee’, which may be known as a Quality Management Committee, Quality Improvement Board, Continuous Quality Improvement Committee, Quality Advisory and Coordination Group or a similar name. On the other hand, the use of such visible executive responsibility is by no means universal. Griffith University (2006), for example, states that:

Quality is embedded in all of our processes; that is, we do not have a separately identified and administered quality office but we aim to apply quality processes in all our activities in order to achieve excellent outcomes.

Many Australian universities claim to have adopted a method that guides their quality systems, usually a CQI cycle based on ADRI or Business Excellence concepts. As noted above, AUQA audit panels quite often find that at the time of audit the espoused method has not yet made an impact among staff or that there has been little attempt to operationalise it. In these cases, the quality assurance method exists more as a mantra than the basis for a sound framework.

I am not suggesting here that Australian universities in general have concentrated their efforts on ‘window-dressing’ in preparation for AUQA quality audit. As this volume demonstrates, many institutions have made significant investments in developing and implementing vigorous quality assurance frameworks. It can be observed, however, that a number of SAIs have focused in the first instance on promulgating ‘quality’ principles and acronyms, without necessarily considering how an ADRI method could be implemented or how it sits with existing quality assurance measures. In this regard, embedding ‘quality’ and embedding ‘quality assurance’ may not be the same: even if everyone is committed to achieving ‘quality’, the institution may not be able to demonstrate the achievement of its goals.

The recommendations in AUQA audit reports suggest that some institutions find it more difficult to articulate how the interrelationships of differing processes and departments will be brought together within an overall quality framework. A key question here is whether an institution treats the word ‘quality’ as a new reference point and adds a ‘quality assurance’ overlay onto its existing processes (either through use of a proprietary system or development of an internal model) or whether it takes existing processes as the core of a quality framework (which requires careful specification of the interrelationship of these processes). The case study of James Cook University suggests that the use of a planning framework as a quality assurance system may be driven by the desire not to impose a new discourse on the university community, although it is arguable that the language of quality assurance is increasingly familiar to professionals in all walks of life.

As noted above, one theme in audit report recommendations is a stronger integration of institutional planning and quality systems. A question frequently asked in the first years after AUQA’s establishment concerns the relationship between an institution’s strategic planning processes and its quality management system. AUQA’s comment, while recognising the centrality of strategic plans to internal standard-setting, emphasises the difference between a strategic plan and an integrated system that enables an organisation to continually reflect on and improve

its performance. Having said this, the majority of institutions now aim to ensure that their strategic planning processes, cascaded through area and unit plans and reporting mechanisms, provide a quality assurance framework for the totality of institutional activities, i.e. assurance that the organisation is 'planning, implementing, achieving and improving upon the quality of everything that it does' (AUQA 2003a).

There is evidence that institutions are now considering, in mature fashion, these questions of how planning and quality assurance processes are related. For example, Boast (2005, p.3) offers the following account of the ways in which the relationship between quality and planning is conceived in the dual-sector University of Ballarat, where:

'Planning' means the processes and systems that facilitate strategic positioning, planning implementation, monitoring and review of outcomes across the University, and that operationalise the University's vision, mission and goals. 'Quality improvement' means the systematic process of reviewing and improving processes and outcomes that support achievement of the University's vision, mission and goals.

That is, although there is a sense that higher education institutions are becoming more confident about the integration of quality assurance with planning and review processes, a planning system is not of itself adequate as a quality assurance framework. Planning processes may not permeate all areas of operation or cover all processes, including processes of academic quality assurance. One useful task for institutions is to identify those areas where there may be gaps in quality assurance processes. Whole-of-institution risk management frameworks also need to be integrated. Thus, there are likely to be ongoing modifications to institutional quality and planning frameworks.

The use of TQM-based approaches and proprietary quality frameworks by educational institutions is recognised as a development of the 1990s (Sims and Sims 1995; Chua 2004; Sahney, Banwet and Karunes 2004), one which often combined improvement of internal processes with external signalling through third-party endorsement. If a tentative conclusion can be drawn, it is that in the past institutions have been more likely to use proprietary models as overall quality frameworks but they are now becoming more selective and sophisticated in the choice of models and when to apply them.

Certain models, such as the Balanced Scorecard[®] and Business Excellence Framework, appear to have ongoing utility, but it is noticeable that many proprietary systems, such as ISO and Investors in People are applied to specific administrative functions rather than to the institution as a whole. Other tools, such as TQM concepts and the McKinnon-Walker benchmarks (DETYA 2000) are less mentioned, while some proprietary systems, such as Six Sigma[®] were designed for a different environment and have not been used in Australian institutions. It is noticeable that universities in Australia and elsewhere now provide on their websites information on a wide range of quality improvement systems and tools (e.g. Curtin University of Technology, National University of Singapore), to assist organisational units in selecting and applying appropriate quality assurance methods.

One area of particular interest for dual-sector institutions is the potential for integration, or at least simplification, of Australian Quality Training Framework quality standards for vocational education and AUQA's approach to higher education quality audit.

Other national and international developments will surely also be relevant to the evolution of quality frameworks in Australian universities, particularly those that imply comparison of standards. For example, institutions will need to ensure that their quality frameworks continue to facilitate processes of accreditation by professional bodies and accommodate more systematic national and international benchmarking of processes and outcomes.

For marketing as well as for management purposes, institutions should take into account the widespread acceptance of ISO and business excellence models in many countries. And, incentives exist for universities to collect 'badges' of third-party endorsement, as witnessed by the growth in international external accreditation of business schools and a sense on the part of some universities that such certification is required to compete effectively. It is possible that institutional interest in generic proprietary quality assurance systems will be superseded by interest in global accreditation systems specific to higher education. (For a comparison of the EFQM Business Excellence Model and the EQUIS model for business school accreditation, see Pupius and Busoni 2000.)

On the other hand, given the power of academic reputation in the international higher education marketplace, demonstration of an academic pedigree may be more urgent than demonstration of quality certification. That is, there may be a resurgence of the promotion of universities *as universities*, rather than as business enterprises. Among institutions that compete in the top flight, there are likely to be fewer references to ISO or other certification or to external quality awards.

Finally, it is likely these will be ongoing convergence of external quality assurance regimes among different nations, including greater mutual recognition. Australian institutions will need to take notice of all these factors in the further evolution of their quality assurance frameworks.

The End of the Affair: Reflections on ISO 9001 and RMIT University

Robyn Adams¹

Introduction

Royal Melbourne Institute of Technology (RMIT) University's management, design and delivery of award programs and courses up to degree level across the University's Victorian campuses have been certified to ISO standards 9001 since 1998. In 2004, in the context of a commitment to reducing unnecessary work and redirecting resources towards tasks identified as essential to support the University's core business, RMIT's senior executive team commissioned a review of the costs, benefits, value and relevance of ISO 9001 certification across the broad scope of application. Subsequently, a decision was taken not to pursue re-certification when it became due in March 2005, restricting ISO certification to RMIT's commercial entities responsible for offshore marketing and recruitment for international onshore students and some commercial training and consultancy services.

This paper provides a critical and experiential evaluation of using the ISO 9001 standards within a tertiary education institution, their impact and challenges of maintaining certification.

Background

RMIT was granted university status in 1992, although its history dates back to 1887 when it first was established as the Working Men's College. Mergers in the late 1970s (with Emily McPherson College) and through the 1990s (with Phillip Institute of Technology, Melbourne College of Decoration and Design, Melbourne College of Printing and Graphic Art and Melbourne Institute of Textiles) have contributed to RMIT's development.

Today, RMIT University is the sixth largest university in Australia, with over 56,000 students across higher education and technical and further education (TAFE) from around 100 countries.² Approximately two-thirds of these students study at the Melbourne city campus; other campuses include Bundoora, Brunswick, regional Victoria and Vietnam.

RMIT's management, design and delivery of award programs and courses up to degree level across the University's Victorian campuses were certified to International Organization for Standardization (ISO) standards 9001:1994 — Quality Management Systems in 1998.³ During 2001, research training was added to the scope of certification. (The delivery of international offshore programs and commercial and contract management were outside the scope of certification.)

The decision to pursue ISO certification was made in the context of using external validation as a catalyst for change, to guide formalisation of a quality management system for RMIT that would support the pursuit of a 'seamless' dual-sector institute, following the mergers with the four institutes noted above during the 1990s. Additionally, at the time, the majority of Victorian public Registered Training Organisations (TAFE providers) had attained ISO certification and there was a perception that benefits in the market place would flow from this initiative.

The broad scope of ISO certification across all onshore teaching and learning and research training activities made RMIT unique within the sector. Other universities have primarily gained ISO certification for discrete schools or units, for functions such as speciality technical services/Information Technology, or for internationalisation activities such as administration, recruitment, advertising and offshore program administration.⁴

In addition to the scope of certification noted above, the two main commercial entities of RMIT University have separate ISO certification for their operations. RMIT International Pty Ltd has been ISO certified since 1997 for its processes supporting offshore marketing and recruitment (including application processing, program information, fee and visa information, and other administration) for full fee-paying international onshore students. RMIT Training Pty Ltd has also been ISO certified for its processes supporting training and consulting services, including publishing and delivery of English language programs, since 1997. Other ISO certification specific to laboratory operations is in place across some parts of the University. For example, the RMIT Drug Discovery Testing Laboratory is certified to ISO standard 17025.

The ISO Standards

The International Organization for Standardization (ISO) 9000 is a series of quality management system standards that require an organisation to manage and control all activities that impinge on its ability to provide quality services (Standards Australia International, 2000:76). The 9000 series of international standards was first introduced in 1987, revised in 1994, and then again revised in December 2000, when it became the ISO 9001:2000 standards to which all certified organisations were required to convert by December 2003. The revisions have resulted in a reduced emphasis on quality documentation, although documentation is still necessary, and they have evolved towards a process approach to management, with a focus on continual improvement and evidence of customer satisfaction.

The standards have had a significant impact globally, with over 500,000 companies across the world in 2004 being registered to ISO 9001:2000 (ISO, 2004).

A review of the literature indicates that while many small to medium-sized enterprise organisations have embraced ISO certification, a significant proportion of ISO-certified institutions appear to be large, manufacturing-based organisations (see for example Chittenden, et al 1998; Elmuti and Kathawala, 1997).

A survey across a broad range of industries by Douglas, et al (1999) indicated that the four main reasons for seeking certification were customer pressure, improved efficiency and productivity, higher-grade products and image/marketing advantages. Interestingly, only 7% of firms viewed ISO as part of an overall quality management strategy, an impetus for RMIT's pursuit of certification in 1998.

Implementation of ISO at RMIT

Preparation for the initial certification to ISO 9001:1994 (gained on 30 October 1998) was undertaken over a period spanning approximately two years and involved the engagement of an external consultant who was familiar with the higher education environment, in addition to an ISO auditor. Existing processes were defined and then mapped onto the ISO standards. Extensive consultation with staff at all levels across the University assisted in allaying concerns of additional paperwork. Quality 'champions' were identified or appointed in each faculty, including Directors of Teaching Quality and Directors of Information Technology, to work closely with staff development officers in preparation for certification (Hall, 1999).

Once certification was successfully gained, in addition to the evidence of systematic internal review activity, maintenance required regular 'surveillance' audits each year and more rigorous re-certification audits each three years. Audits were conducted by one or two certifying agents from Quality Assurance Services (now SAI Global). Until 2002, 'surveillance' audits were conducted six-monthly. One-day audits were then conducted four times per year, and from 2003 two two-day audit visits were held each year with two auditors. In November 2003, a three-day audit was held for conversion to the 2000 standard.

Each audit visit included various aspects of the University's operations — for example, student feedback, program design and delivery, policy framework, research grants, laboratory management, role of academic board, library — and involved interviews with approximately 20 staff by each auditor per day. Audit programs were developed by RMIT, and endorsed by the external auditor prior to their visit. No background documentation or support material was requested by the auditors prior to the visit, and generally these requests were minimal.

The University adopted a deliberate strategy to minimise the impost on staff time for the external audits. No formal self-assessment activity was undertaken beforehand, and schools and areas participated directly in visits, on average only once each two years. The involvement of schools and areas was voluntary, with nominations based on an attempt to achieve broad coverage and involvement across the University in line with the scope of certification that covered all onshore teaching and learning and research training activities.

One of the most resource-intensive aspects of audit preparation was the planning and development of the audit visit schedule to cover a broad range of activities, locations and functional areas across the University, and ensuring that participants were briefed adequately. These tasks were coordinated centrally, and included a brief visit to areas involved, to confirm the issues to be covered during the audit visit and that the associated evidence and documentation was available.

At the conclusion of each audit a brief verbal overview was provided by the auditors to highlight the key findings prior to the development of a brief written audit report, which was generally received within a month after the audit visit. This report commented on strengths, issues of concern, opportunities for improvement, and listed any non-conformances against the ISO standards. A summary of the report findings was considered by the senior executive team, with quarterly monitoring of progress to address opportunities for improvement.

Direct costs of ISO certification to RMIT included a licence fee, audit fees, and sundry expenses to support audit visits, which were estimated at \$17,000 per annum during 2004.

Opportunity costs, which included staff involvement in the audit visits and preparation time and coordination costs by the Quality Consultancy Unit, were calculated to be approximately \$27,000 per annum.

Benefits of ISO certification

Since 2003, formal feedback from staff involved in external ISO audits has been gathered to ascertain direct benefits. Some examples are provided below, of which several are consistent with those highlighted in various studies. For instance, the studies by Taormina (1996), Elmuti and Kathawala (1997), Quazi and Padibjo (1998) and Sun (1999) reveal that companies gaining ISO certification have benefitted from development of formalised processes and procedures, improved documentation, higher perceived quality, faster development times, improved error rates, a positive cultural impact and catalyst for change. Studies related to higher education, as noted by Karapetrovic (1998), report benefits of ISO 9000 such as market advantage, clearer articulation of the rights and responsibilities of students and staff bodies, wider understanding of the University's objectives, and market advantage nationally and internationally.

Continuous improvement

Arguably the most significant benefit of certification for RMIT was the use of the ISO 9001 framework (particularly in the early stages of certification) to provide focus and momentum to formalise the development of quality assurance and improvement processes and systems across the University. Certification provided a methodology for improvement activities and an impetus for areas to reflect on the evidence available to support their activities. In line with the 1994 version of the standard, opportunities for improvement generally focused on lack of procedures, document control issues (such as pagination, version numbers), and record management issues. This often led to updating records and document management systems in the areas concerned.

Over the six years of certification, one non-conformance was identified during 2002. This related to the auditor's findings of a lack of appropriate follow-through of internal audit reports; specifically highlighting an identified risk relating to the initial implementation of the University's academic management system on data conversion and acceptance testing. The finding prompted development of a systematic approach to monitoring and reporting of internal audit findings and an alignment of review activities of the Internal Audit Group and the Quality Consultancy Unit.

Over recent years, external audits have provided impetus for further improvements, including:

- the introduction of regular executive management reviews (quarterly and more recently six-monthly) that are structured around the 'Approach, Deployment, Review and Improvement' (ADRI) approach. The reviews include processes for monitoring planning and improvement activities, tracking policy and procedure changes and considering student feedback
- action on identified occupational health and safety issues (including chemical storage processes and management of material safety data sheets)

- development of a 'security on campus' policy
- strengthening of student complaints collection and management procedures
- development of a code of practice for external maintenance contractors on campus
- provision of critical incident training for counselling staff
- strengthening of document control and records management (e.g. for staff development) across various areas.

Validation and identification of strengths

RMIT's strong commitment to quality outcomes has also been recognised over time through the ISO audit reports. Audit reports have validated systems and processes in place and have provided commendations and/or listed strengths across various areas.

Staff feedback elicited at the conclusion of each audit confirmed that the audit visits provided an opportunity to showcase their work and validate strengths, and that staff appreciated the recognition. Further, the audit reports provided evidence of strengths, such as in relation to student feedback processes, and could be used in external legal hearings, such as those concerning student disciplinary matters, appeals matters, and in government submissions.

During 2003, successful conversion to the 2000 standard was a welcome positive outcome at a time when RMIT was experiencing significant changes to structures (moving from seven faculties to three portfolios) and had been subject to media scrutiny and negative press concerning failed implementation of the student administration system. A celebratory event was held, and external media releases and notes to staff publicising the University's successful conversion were developed. Anecdotally, these activities provided a cultural 'boost', although the outcome was not reported in the wider media.

Evidencing and monitoring outcomes

As the University is able to request specific foci for some portion of the ISO audits, during 2004, visits were used to monitor implementation of some of the key recommendations in the Australian Universities Quality Agency (AUQA) Audit Report on RMIT.⁵ This provided an additional assurance mechanism to track progress against committed actions within the University's implementation plan, which was sent to AUQA in May 2004.

In order to meet the 12 Australian Qualifications Training Framework (AQTF) standards it is imperative that RMIT maintains a relevant quality management system, with internal auditing of that system. ISO certification evidences that this is in place. Significantly, the ISO external audit process was used in April 2004 to assist in RMIT's successful re-registration as a Registered Training Organisation (RTO) with the Victorian Qualifications Authority (VQA).⁶ RMIT's current ISO auditor, who has knowledge and appreciation of RMIT's systems and processes, was able to confirm the requirements for re-registration, arguably more efficiently and effectively than the use of an external auditor with limited or no relationship to RMIT.

The auditor noted in his report that, 'RMIT has a strong commitment to quality in management and delivery of training programs, maintaining certification to ISO 9001:2000 across all activities managed by the organisation' (Angliss 2004, p.5).

Tendering processes

One of the perceived benefits of ISO across RMIT was the necessity for certification when tendering for certain government contracts. Although many tender documents refer to ISO certification to evidence the existence and robustness of the University's quality and risk management systems, a review of government and other tender processes revealed that certification to ISO standards is not a prerequisite for tender applications.

Marketing and reputation

The ISO certification logo was included on RMIT's website, on the home page and on the foot of every Web page, in marketing brochures and on some letterheads. The impact of ISO certification on international marketing outcomes, particularly in Asia, while anecdotally supported, was not able to be evidenced directly through increased international student intakes following certification. Fundamentally, RMIT University is the 'brand', not ISO certification. In any event RMIT International Pty Ltd, the commercial arm responsible for international student recruitment, has maintained ISO certification for its processes.

At December 2004, approximately 82% of TAFE institutions in Victoria had ISO 9001 certification for the design and delivery of programs and training services.⁷ However, a scan of websites revealed that only 28% of these institutions used the ISO logo on their home pages. Some mention ISO certification in various promotional documents and plans, although it would seem that certification is perceived to be more of an internal tool that assists in meeting AQTF requirements than providing specific competitive advantage through focused marketing.

Challenges

A number of factors have challenged effective engagement with the ISO standards across the University. First, the standards, while being a sound and thorough basis for good practice in quality management across an organisation, have been viewed by some as rigid protocols couched in terminology such as 'control of production', 'identification of defects', 'non-conformance', 'corrective action', 'customers' and 'preventative action', which are more intuitive and readily applied to commercial and production organisations than across an academic learning environment. (An interpretation guide for education has been published by Standards Australia to assist in this regard.)

Second, the external auditors appointed by SAI Global, while having some educational experience, were not considered by some to be as appropriate as peers and colleagues with direct higher education and/or discipline expertise.

Third, because of the deliberate attempt to reduce the impost on staff time from external ISO audits, there was less engagement with the process in terms of the number of staff involved, the non-compulsory nature of participation, and in minimal preparation and self-reflection. Self-reflection and review are often considered the most valuable components of audit and review processes. While external audits provided the University with an opportunity to showcase its strengths and good practices to auditors, there was no robust process to promote self-reflection and analysis as part of the audit process.

Fourth, although external audit reports were monitored by the senior executive team, rewards, recognition and performance management systems were not aligned to the outcomes, resulting in a perceived lack of vigour and impact of the ISO audits.

Fifth, there was a perception by many academic staff that ISO certification, which focused on records, documentation and document control, had limited impact on teaching, learning and research outcomes. Some even argued that ISO activities added an unnecessary burden on an already increasing academic load, encroaching on scarce research and consultancy time.

Karapetrovic et al. (1998) note that several similar concerns have been revealed throughout the literature for higher education institutions, including fear of too much documentation and paper bureaucracy, formalisation of ISO clashing with the 'open and informal culture in an academic unit' and the need for clear interpretation of the standards for education. Parratt and Holian (1999) highlighted similar issues across organisations in their study, including increased paperwork, perceived complexity and intimidation from quality systems, lack of ownership of systems, and difficulties keeping up with changing procedures.

The University's changing environment

Since RMIT gained ISO certification in 1998, formal regulatory and/or legislative requirements have been introduced, involving compulsory external auditing of the University's functions. Examples at the national level include the Australian Universities Quality Agency (AUQA) audits, with first-round audits commenced in 2002 after trial audits in 2001, and development of the Australian Qualifications Training Framework (AQTF) in 2001. At the Victorian state level, the Office of Training and Tertiary Education (OTTE) conduct TAFE-related audits, including annual Invalid Module Enrolment audits; and enhanced regulatory requirements such as Workcover; and the Victorian Auditors-General processes. These quality assurance mechanisms are in addition to other external requirements such as professional accreditation of many programs and the significant process assurance measures arising from introduction of the *Higher Education Support Act (Clth) 2003*.

Until 2002, the University also used the Australian Business Excellence Framework, and Balanced Scorecard (incorporating Triple Bottom Line +1 data) to underpin its approach to quality. In 2002 the Business Portfolio within the University decided to pursue European Quality Improvement System (EQUIS) accreditation through the European Foundation for Management Development.⁸ EQUIS provides an accreditation framework at an international level, based on a set of criteria for business schools of high national and international standing.⁹

The plethora of quality frameworks, reporting and auditing requirements has created confusion among staff and the development of a compliance-driven culture. This was confirmed in the AUQA Audit Report on RMIT, which noted that, 'the RMIT Quality Management System is a complex system that incorporates a number of models, frameworks, quality systems and review processes...this has led to confusion throughout the organisation...and in some cases has led staff to adopt a superficial compliance approach with little effective focus on continuous improvement' (AUQA, 2003, p.8).

The AUQA panel recommended that, 'senior management take action to simplify and consolidate the quality management system and related performance monitoring processes

to ensure that only those demonstrated to add value to RMIT's activities are retained' (AUQA, 2003, p.20). In addition, like many other institutions, RMIT has undergone significant structural changes in response to financial and other imperatives, including significant implementation issues with the University's new academic management system in 2002. As part of a focus on greater efficiencies, reduced expenditure and significant rationalisation, simplification and standardisation of processes, systems and services, the University's structure was changed from seven faculties to three portfolios in 2003.

Against this background, late in 2004, the Vice-Chancellor's Executive team (VCE), comprising senior managers across RMIT, re-affirmed its commitment to reducing unnecessary work and redirecting resources towards tasks identified as essential to support RMIT's core business. As part of this commitment, the VCE requested a review of the costs, benefits, value and relevance of ISO certification prior to undertaking the scheduled re-certification audit in March 2005. The review objectives were to:

- a. determine costs/benefits of continuing with ISO certification across RMIT
- b. determine the impacts associated with ceasing certification
- c. identify opportunities to increase benefits from ISO certification
- d. make recommendations to the Vice-Chancellor as to the future of ISO certification across RMIT.

The review process involved semi-structured interviews with over 50 key internal and external stakeholders and representatives from other institutions, a literature review, benchmarking of the ISO scope against other institutions, and a risk assessment of not continuing ISO certification.

Rethinking ISO certification

The extensive internal review process revealed that the majority of staff believed that ISO did not make any discernable difference to RMIT's operations.

This finding is consistent with many studies that have revealed no discernable impact on business performance from ISO certification. For example, the Euro-Australian Cooperative Centre (EACC) for Global Innovation Management, based at the University of Melbourne, published a series of research papers in 2000–2001 that concluded there was no bottom line gain in ISO 'quality' certification (Terziovski et al. 2000). Quazi and Padibjo (1998) reported no perceived advantage in certification of the service industry, while Terziovski et al. (1997) found that certification had no significant, positive relationship with business performance.

Many review participants noted that while there is external recognition of ISO 9001, peer evaluation — through processes such as program accreditation by professional bodies — is of more commercial and professional value.

RMIT's VCE noted these outcomes, while considering the risks associated with cessation of ISO. These risks included:

- potential adverse publicity to RMIT from a perceived failure to maintain certification
- possible staff perceptions that quality is no longer important
- perceived reputational impact resulting from other TAFE institutions retaining ISO certification

- lost opportunities to support implementation of sound management systems and practices arising from external ISO audit activities.

Following careful consideration, the VCE made a decision not to pursue re-certification when it became due in March 2005, directing resources instead towards tasks identified as essential to support the University's core business, and noting that ISO certification would remain for the University's commercial entities at the time, namely RMIT International Pty Ltd and RMIT Training Pty Ltd.

Conclusion

ISO certification was introduced to RMIT in 1998, when external quality assurance frameworks and external reporting and regulatory mechanisms such as the Australian Qualifications Training Framework and AUQA audits did not yet exist. The ISO 9001 standards provided both a framework to strengthen and consolidate quality assurance and improvement processes across the University, at a time when mergers between several institutes were being bedded down, and an opportunity for external validation against internationally recognised standards.

The standards, however, require a high level of documentation plus audited evidence that the intended quality is being delivered. Challenges in implementation stemmed from, *inter alia*, staff perceptions that the standards were too rigid, commercially focused and directed towards documentation/records management, and therefore were having limited impact on teaching, learning and research outcomes.

The standards do provide a robust framework for establishing quality management processes and systems across an institution. Like other quality frameworks, effectiveness within an institution depends on the way in which they are applied. RMIT had a deliberate strategy to minimise impost on staff time in maintaining certification. As a result there was limited engagement with the standards, with preparation for external audits and, sometimes, with the recommendations from the reports.

Nevertheless, as outlined there are some discernable process improvements directly attributable to external audits linked to ISO certification. External auditing has prompted broad reflection on current practices, and an opportunity for staff to identify and showcase strengths and good practices for external recognition. Notably, the same external auditor from SAI Global (previously Quality Assurance Services) was involved from the time of preparation for initial ISO certification, prior to 1998, to the time of cessation of certification in 2005, enabling him to gain a sound understanding of RMIT's operations.

In terms of an impact on outcomes, the literature suggests that a major driving factor behind the adoption of ISO by many organisations is the belief that it will improve customer satisfaction (Gordon, 2004). A review of RMIT's student satisfaction outcomes over the period of certification reveals no improvements that can be attributed directly to ISO certification.

Importantly, there appears to have been a shift in the perception of the benefits of ISO certification over time across RMIT. As quality systems such as risk management processes, research training reviews, program reviewing, planning and policy frameworks have matured and external quality assurance provisions have increased, the perceived value of ISO by staff and

some members of the senior executive team has correspondingly diminished. This outcome is consistent with longitudinal research conducted by Casadesus and Karapetrovic (2005) from 1998 to 2002 that revealed the benefits of ISO in over 100 companies had decreased over time (although maintenance and implementation costs had also decreased).

Other research conducted by Terziovski et al. (1997), and Juran (1999) in Terziovski (2000) confirms the diminished benefits of certification over time. One study concludes:

It appears that companies that are at the beginning stages of their quality journeys find that the ISO 9000 series of standards provides them with a guide for implementing a basic quality system. But for companies with good quality systems, the standard often just adds costs, delays and burdensome documentation, rather than providing any competitive advantage. (Juran 1999, p.30)

Accordingly, RMIT's VCE made a decision not to pursue ISO re-certification for its management, design and delivery of award programs and courses and research training when it became due in March 2005. As noted above, separate ISO certification remained in place for the University's commercial entities responsible for offshore marketing and recruitment and commercial training activities.

Since cessation of ISO certification, RMIT has reallocated some resources to focus on further development of a cycle of organisational reviews of each school and area. These reviews involve self-assessment aligned to the University's strategic directions, external and internal validation by a panel comprising academic and management expertise and participation by a wide range of stakeholders. At the time of writing [September 2005], anecdotal feedback has indicated that these have had a valuable impact on strengthening a learning culture in which reflection, development, improvement and innovation aligned to performance outcomes relevant to RMIT are encouraged.

These reviews supplement other internal quality assurance processes at RMIT, including regular compliance reviews against standards in the Australian Quality Training Framework and the *Education Services for Overseas Students Act (Clth) 2000*, risk assessment aligned to planning processes, internal audit activities, student evaluation mechanisms, performance monitoring against indicators and targets, regular program review and reporting processes and the quality assurance for research training (QART) system.¹⁰

What lessons can be drawn from RMIT University's experience with ISO? Like any quality framework, a mechanistic approach to implementation is likely to result in a compliance approach to quality that is viewed as largely irrelevant to teaching, learning and research outcomes.

There is neither a panacea nor a simple blueprint to help with the complex task of embedding quality into a university culture. Developing a culture in which continuous improvement is genuinely embraced demands strong leadership, commitment to a shared vision, clear accountabilities for processes and outcomes, review and evaluation mechanisms that are rigorous and credible, and aligned performance, recognition and reward systems. Efforts to ensure that quality assurance processes and systems are clear, relevant to the organisational culture, and linked to outcomes aligned to organisational objectives should be a priority, with approaches being informed by standards and frameworks, but not driven by them.

The Evolution of Quality at Edith Cowan University

Susan King & Alison Thair

Introduction

Edith Cowan University (ECU), a modern and progressive University, is 14 years old, having been granted university designation in January 1991. It has positioned itself as a university focused on the provision of service to, and preparation for, the knowledge-based service professions. This is in part an extension of ECU's origins, but also reflects its assessment that as the global knowledge economy and society develops employment growth and wealth creation will be increasingly centred in the professions of the modern services sector.

Prominent in ECU's mission is the desire to provide 'university education of recognised quality', and ECU considers itself well advanced in terms of its approach to quality, while acknowledging the need for continuous improvement.

ECU quality framework

Quality model

At ECU considerable effort has been expended in establishing systems and structures to support the adoption and implementation of the University's Quality Framework. ECU's quality framework is based on Business Excellence Australia's (BEA) Australian Business Excellence Framework (ABEF). The core idea in the framework is that building quality involves a continuous improvement in the processes underlying the 'production' of products or services and effectively involves a 'plan, do, review' approach. As quality is a continuous process it can incorporate, and consolidate, improvements in performance and enable an organisation to respond to changes in the environment. Consequently, the University's approach to quality is articulated through a Plan-Do-Review-Improve (PDRI) model.

Impetus for quality

The drive to enhance quality assurance processes at ECU was as a response to the Commonwealth Government's quality assurance agenda for universities. The University did not perform well in the quality assurance exercises launched by the then federal government in the mid-1990s and wished to improve on its performance. With increasing competition in the higher education sector, and the need to build a competitive advantage for ECU, a strong

impetus was provided for the reworking of quality assurance systems at ECU. Additionally, the establishment of the Australian Universities Quality Agency (AUQA) in 2000, which focused on the need to have in place quality assurance processes sufficient to ensure the integrity of academic programs, provided further momentum to implement a more systematic approach to quality assurance processes at ECU.

Central to the reworking of the ECU quality approach was the tenet that all staff would have a role to play in enabling the University to be competitive. In her inaugural speech at the University in 1997, the former Vice-Chancellor, Professor Millicent Poole, recognised the importance of the University's staff as being the people who drive excellence: 'The staff can give the University a sustainable competitive advantage if they rise to the new possibilities and meet the challenges of change.'

The University set out its quality agenda in its 1998–2002 Strategic Plan which highlighted a commitment to continuous quality assurance and placed an emphasis on enhancing the quality of learning and teaching and to further aligning ECU's learning environment with ECU's mission of: '...providing, within a diverse and dynamic learning environment, university education of recognised quality, especially for those people employed in, or seeking employment in, the service professions.'

To achieve its mission the University needed to establish:

- what its students would gain from the core activities of teaching and learning, research and research training, and internationalisation
- what to expect from the services and support that the University provided to students and staff
- how to assess the success of approaches utilised
- planning for improving the delivery of core activities.

It was recognised that processes of planning, delivering and reviewing needed to be implemented in the organisation at both the strategic and individual level. With regard to this, the former Vice-Chancellor, in her second annual report in 1999 to ECU's Council, stated that:

A key challenge for ECU is to raise internal and external community perceptions of quality. This is no easy task and will take some years to achieve given our current level of performance. However, unless we make quality a key focus we will find it increasingly difficult to remain market competitive.

The ABEF model was considered and selected by ECU as it provided a systematic means by which to address 'whole of organisation' quality issues; help drive improvement; and provide a basis for national and international comparison. The Business Excellence model enabled practices, which were already in place at ECU but not applied comprehensively, to be drawn together and allowed ECU to adopt an approach whereby quality was enhanced in all activities undertaken.

Guided Self-Assessments

In 1999, as a first step to identifying ECU's status in quality, the University commissioned Business Excellence Australia to undertake a Guided Self-Assessment (GSA) against the ABEF

in order to provide a base line for the University's strategic and organisational change. While the GSA provided a baseline set of data as a gap analysis against which progress towards ECU's objectives of best practice and excellence could be measured, it became evident during the self-assessment process that the business language employed in the framework needed considerable interpretation in order to be effectively applied to ECU.

During 2000 ECU's Areas of Scholarship Quality Assurance (ASQA) Committee worked on developing a quality assurance framework for ECU. The ASQA Committee had worked, in part, on translating the ABEF approach into a framework using common language describing university activities at ECU. It provided a Progress Report to the Academic Board in February 2001, which identified two 'domains' of University activities aligned with ECU's commitment to service, professionalism and enterprise: Academic activities (which included: Teaching and Learning; Research and Creativity; International and Commercial; University Service; Professional and Community Engagement; Enterprise on behalf of the University); and Support activities, including: Academic Support; Administrative Support; Corporate Governance.

In 2001 and 2002 the University worked collaboratively with Business Excellence Australia to discuss customisation of all GSA materials that met ECU's specific needs for language consistent with that contained in the University's 'Quality@ECU' brochure. (This brochure was launched in August 2002 and, following further staff feedback, re-distributed in April 2003.)

It was agreed that a number of categories in the ABEF framework relating to People (Category 4), Customer and Market Focus (Category 5) and Processes, Products and Services (Category 6) needed to be addressed.

The outcome of discussions was the development of a customised ABEF, incorporating core activities and enablers focused specifically on:

- improving core activities
- demonstrating leadership, innovation and enterprise in all activities
- knowing the needs of students, other customers, stakeholders and markets
- valuing and investing in staff
- using data, information and knowledge to inform decision-making
- improving outcomes.

A second GSA was commissioned in 2003 to assess ECU's progress. The University's scores in the second assessment showed a significant improvement in the organisational assessment score. This improvement was seen to be reflective of a quality framework that was driving review and improvement processes at ECU, as well as the Executive and Senior Managers' committed leadership in driving organisational direction.

The role of staff became a fundamental component of ECU's approach to quality with the concept that all staff at ECU were, and are, responsible for quality in the University. Consistent with this position ECU elected not have a large centralised Quality Unit at ECU, but rather a small strategic facilitation unit. All ECU staff members and work units are responsible for quality and are expected to seek to continuously improve their processes, the quality of services delivered and the outcomes. The 2003 GSA Report noted that improvements in progress resulted from integrated and linked planning processes with increased involvement and ownership.

Adapting and adopting quality

Strategies for quality

In 1998, *ECU's Strategies for Quality* was developed and disseminated to the University community through forums and committees including the Curriculum Teaching and Learning Committee and Academic Board. The macro-document outlined strategies for quality and aimed to achieve excellence at ECU by embedding best practice principles into ECU's scholarship and support activities. However, feedback acknowledged that the language of the document was too generic and not sufficiently tailored for an academic environment and that it should make reference to academic standards.

Academic Board

In 2000 the Academic Board endorsed, in principle, the approach proposed within the *ECU Strategies for Quality* document subject to: further consultation with the Faculties; and revision of the wording of the document to ensure that the language contained in the document was made more appropriate to an academic setting. Following modifications the document was endorsed by Council in late 2000.

It was also recognised that the Academic Board had special responsibilities for academic quality and academic standards. Late in 2000 the Academic Board established a Quality Issues Working Party which was tasked with developing a framework for defining the Board's role in assuring quality in all matters relating to the academic activities of the University. The Working Party developed two papers: *Academic Board: Establishment, Function and Authority* and the *Role of the Academic Board in Quality*, which provided an active role for the Academic Board to monitor and participate in the University's quality assurance processes and which was approved by the Academic Board in 2002.

Training

During 2001 ECU's Chancellery Group endorsed, and budgeted for, the delivery of 'Training for Business Excellence Frameworks', which was a series of workshops designed to enable staff to understand the underlying principles of the Framework; apply the principles and framework; and deliver knowledge of the ABEF category items and PDRI dimensions. Training was targeted at Heads of School and other academic program managers, general staff managers and their staff seeking to improve service levels and efficiencies. Feedback from staff indicated a commitment to driving change, developing a clearer understanding of the ABEF, and continuing professional development activities through a 'quality network'.

Planning

ECU recognised the need to embed the principles of its quality framework into the University's operations. As part of its approach to assuring quality ECU adopted a Strategic and Functional

Planning cycle, deployed through cascading plans and local operational systems; and an integrated cycle of layered self-assessments and reviews to match the cycle of plans and operational systems.

In 2002, the University commenced the development of a new Strategic Plan, *ECU Strategic Plan 2003–2007: A Stronger ECU*. The Plan, which was endorsed by the Academic Board and Council in late 2002, contained an appendix titled ‘Planning at ECU’ which linked planning to quality processes, budgeting and performance monitoring. In 2003 a revised Planning Framework was developed for internal ECU planning, with the intention of simplifying and better sequencing and aligning ECU’s previous planning processes. The revised Planning Framework also depicted the relationship between planning and review mechanisms, reflecting the PDRI cycle fundamental to ECU’s quality approach.

Reviews

To complement planning processes a series of review processes were established at ECU, including: Area of Scholarship Reviews (AoSR) and reviews of research centres, both undertaken on a five-yearly basis; Triennial International Quality Review processes; and annual reviews of faculties and centres. The review processes sought to bring together three traditions in quality assurance: the traditional university system of peer review; performance management that involved performance indicators; and the ABEF of guided self-assessments.

ECU chose to place a particular emphasis in building quality in its *areas of scholarship*, which are cognate areas of study, as this was viewed as an appropriate means by which to assure, in the first instance, the quality of ECU’s teaching, learning and research activities. The guidelines for AoSRs replaced faculty accreditation processes and involved reviews by external panels to verify that outcomes were appropriate and planning and operational systems effective. Pilot reviews were undertaken in 2001 after consideration of the type of data necessary to appraise quality in areas of scholarship. Guidelines for AoSRs were revised in the light of the experience gained in the pilot reviews, followed by an updating of the AoSR Policy in mid-2003 and the development of supporting guidelines, process charts and protocols to facilitate the review process.

External reviews of ECU’s research centres, based on a five-year cycle, commenced in 2000 for all University designated Level II and Level III research centres and institutes. Outcomes are reported to and considered by the Academic Board, the relevant faculty board and the University Research and Higher Degrees Committee.

Guidelines for ECU’s annual reviews for faculties and centres, introduced in 2000, were modified in 2001 to include aspects of the ABEF as well as an aid to assist staff in making sense of the framework from an ECU context, see Table 1. at the end of this chapter. Triennial reviews of offshore programs commenced in 2002, using an ECU developed template. As a result of reviews conducted in that year a number of improvement opportunities were identified, including the need for improved externality on the review panel. In September 2003, revised processes and procedures were put in place to ensure greater externality, improved response times, and to enable a more systematic process of following-up recommendations and reporting to the Academic Board. Further refinements to the review process were undertaken in early 2005.

Towards excellence

Quality@ECU

In 2002, ECU officially branded and launched quality (Quality@ECU), with the Vice-Chancellor as the sponsor, through a number of initiatives, including the establishment of a Quality Reference Group and Quality Support Network, and the development of support material and tools, including quality brochures and a website resource. Quality@ECU is effectively a deployment strategy for quality and provides a tangible resource to help ensure that quality is embedded in the outlook and activities of all staff.

A Quality Reference Group (QRG), sponsored by the Vice-Chancellor, was established to enable debate and discussion about ECU's approach to quality and to facilitate communication across the University. The group is comprised of a cross-section of academic and general staff who meet, as required, with the Vice-Chancellor and provide feedback and advice on strategic quality matters at ECU.

The Quality Support Network (QSN) is convened by the Strategic Quality Coordinator and provides opportunities for staff with particular responsibilities for, and/or interests in, quality matters to discuss relevant issues. The Network provides an informal forum in which to exchange experience and expertise and to communicate operational initiatives and projects.

The QRG and QSN were not intended to, and do not, duplicate the role of the Quality and Audit Committee (QAC), a subcommittee of Council which commenced operation in early 2002. This committee was formed through a merging of the former Quality Committee and the Risk Management and Audit Committee and provides an overview of these areas of governance in the University.

ECU Quality brochures focus on the PDRI cycle. The brochure is currently in its third iteration following feedback from staff and various review processes, including the 2003 GSA and the 2004 AUQA audit of the University. The current brochure has sought to simplify processes and the quality model, while retaining the focus of the ABEF and staff ownership for quality.

The website provides a resource, including templates, guidelines and information on review processes including an accreditations register and quality matters of interest to ECU's community, so as to further communicate and facilitate the understanding of quality within faculties and centres.

Recent additions to the website include the development of a Policies, Practices and Processes (PPP) database, which is a searchable database that provides exemplars of good practice at ECU commended by external and internal review panels.

Embedding quality

The ABEF, PDRI cycle and values/principles for higher education as described by AUQA in its *Audit Manual* have become embedded in ECU's approaches.

In preparing its submission for the March 2004 AUQA audit, the University structured the document along the lines of the seven principles underpinning ECU's approach to

quality (see Table 2). The submission incorporated PDRI aspects and aimed to answer four questions, namely:

- what are we trying to do? (Plan)
- how are we doing it? (Do)
- what progress have we made? (Review), and
- what are our improvement opportunities? (Improve).

Guidelines for AoSRs and annual reviews of faculties and centres require submitted Performance Portfolios to address both core and enabling activities (see Table 2) and the design of AoSRs incorporates the elements of proximity, indicators, externality, feedback and alignment described by AUQA.

Professional development partnerships

The University has recognised the importance of quality-related training and provides resourcing for professional development strategies that foster leadership in, and understanding of, quality matters at ECU. A number of modules relating to quality tools and approaches, developed in partnership with Professional Development staff at ECU, enable academic and general staff to understand the concepts, principles, and application of the Quality@ECU approach. Discrete training is provided for: furthering the understanding of quality in the University; documentation; benchmarking; and business process improvement that combines theoretical knowledge with ECU case-studies and approaches. The principles of ECU's quality model, i.e. Plan-Do-Review-Improve, are embedded in all professional development activities provided to the University's staff.

Key Performance Indicators

Key Performance Indicators (KPIs) are also an important component of ECU's approach to quality. While ECU's 1998–2002 Strategic Plan listed 21 KPIs a mid-term review of the Plan suggested the development of 'nested' KPIs to provide a consistent, sustained picture of performance over time to senior managers. Since 2003 the University has focused on refining its KPIs, which are composed of a set of core KPIs reported on to Council and a set of management KPIs monitored by the Vice-Chancellor's Planning and Management Group (VCPMG), and associated targets. Recent KPI workshops convened for QAC have enabled the University to further enhance its KPI framework with recommendations for improvement to be presented in December 2005 for Council approval.

Benchmarking

Benchmarking is recognised as an important aspect of ECU's quality framework. In recent years the University has engaged in whole-of-University international benchmarking, organised by the Association of Commonwealth Universities. Annual benchmarking exercises provide an opportunity for ECU to compare its practices and policies, which to date have included governance, risk management and audit, student services, international, leadership, change management and strategic alliances with other Australian and international universities.

A Benchmarking Framework has been developed and communicated to staff, which indicates ECU's encouragement of benchmarking and helps to clarify arrangements that individual faculties/centres might put in place to engage in meaningful benchmarking activities. The University is in the process of furthering its benchmarking priorities, particularly in relation to the core activities of teaching and learning, research and international. The strategies proposed include identifying national and international benchmarking partners in selected knowledge clusters.

Improvements to review processes

Refinements to ECU's review processes, resulting from review recommendations, have been implemented and focus on consolidating, simplifying and integrating review strategies and processes. Guidelines for the annual reviews of faculties and centres were simplified in 2004 and now incorporate the inclusion of 'observer/participants' on the Review Panel. This has enabled the review process to incorporate and facilitate cross-faculty and cross-campus input and to communicate key strategies and operational priorities to faculties and centres.

A review of the first cycle (2001–2004) of ECU's AoSR process was undertaken in 2005. Recommendations arising from the review report were approved by VCPMG in September 2005 and endorsed by the Academic Board. Improvements are being implemented and will see an added focus on both enhancing key data sets required for each school's AoSR Performance Portfolio; and on communication, training and resource information.

Analogous reviews of centres will commence in 2006. A draft policy framework is soon to be provided to VCPMG for endorsement, which will enable core functions in the University's larger service centres to be reviewed by panels composed of internal and external members. It is anticipated that outcomes will further inform key processes and enable benchmarking of approaches to be undertaken.

Outcomes

While ECU recognises that its quality framework and processes are relatively young it is justifiably proud of the gains made over the last few years. The 2003, GSA found significant improvement in ECU's strategy and planning processes, which indicated an increased understanding of, and focus on, alignment to achieve business outcomes. Results were highly favourable showing an improvement in the organisational assessment score found on all seven dimensions of the ABEF. The 2004 AUQA Audit of the University highlighted a large number of commendations relating to both core and enabling processes and activities undertaken at ECU.

In the coming years, the University will focus its attention on further consolidating, simplifying and integrating strategies for quality and in positioning itself for success.

TABLE 1: TRANSLATING THE ABE FRAMEWORK FOR ECU (ECU ANNUAL REVIEW GUIDELINES 2001)

Seven Categories	ABEF Categories	ECU Categories
Category 1	Leadership & Innovation	<p>Leadership, Innovation & Enterprise At ECU, all staff can exhibit leadership, innovation and enterprise. This includes:</p> <ul style="list-style-type: none"> • Individual Staff • Unit & Course Coordinators • Heads of Schools & Program Directors • Managers & Supervisors • Deans and Directors • Chancellery Group • Vice-Chancellor • ECU Council.
Category 2	Strategy & Planning Processes	<p>Strategy, Planning & Budget Alignment At ECU, this will include reference to:</p> <ul style="list-style-type: none"> • ECU Strategic Plan, functional plans and faculty, office or centre operational plans • Annual Budget and budget process • IT planning and resources • Capital planning and funding.
Category 3	Data Information & Knowledge	<p>Data Information & Knowledge At ECU, all decision-making is data-driven using:</p> <ul style="list-style-type: none"> • COGNOS Executive Information System • University, faculty and centre data sources.
Category 4	People	<p>ECU Staff At ECU, all staff can exhibit service, professionalism and enterprise, while the University as a whole undertakes workforce planning and support.</p>
Category 5	Customer & Market Focus	<p>Students, Customers, Markets & Stakeholders</p> <ul style="list-style-type: none"> • Internal and external customer relationships • ECU students and student markets • Employers • Professions • Research markets • Community at large.
Category 6	Process, Products & Services	<p>Processes, Products & Service: Academic & Support</p> <p><u>Academic Products and Services</u></p> <ul style="list-style-type: none"> • Teaching and Learning • International and Commercial • Research and Creativity • Professional Engagement and Service to the Community • University Service and Enterprise. <p><u>Support Services and Processes</u></p> <ul style="list-style-type: none"> • Academic Support Services • Administrative Support Services • Corporate Governance Processes.
Category 7	Business Results	<p>ECU Outcomes At ECU, Council had adopted fourteen KPIs for the institution as a whole. Faculties, centres and offices may refer to these and to any other indicators used as measures of outcomes against their planned objectives.</p>

TABLE 2

ECU QUALITY PRINCIPLES AND AUQA PERFORMANCE PORTFOLIO STRUCTURE

Quality @ ECU Framework	Structure of ECU Performance Portfolio
	<p>Part A: Introduction</p> <ul style="list-style-type: none"> • ECU’s Approach to the AUQA Audit • Setting the Content.
<p>We commit to the following seven principles :</p>	<p>Part B: Core Activities</p>
<p>1. Improving our Core Activities in</p> <ul style="list-style-type: none"> • Teaching and Learning • Research and Creativity • International and Commercial • University Service * • Professional and Community Engagement * • Enterprise on behalf of the University.* 	<ul style="list-style-type: none"> • Teaching and Learning • Research and Creativity • International and Commercial • Professional and Community Engagement.
<ul style="list-style-type: none"> • Academic Support Services such as - Library - Learning and Development Services - Research Office - Graduate School. 	
<ul style="list-style-type: none"> • Administrative Support Services such as : - Staff Services - Student Services - Financial Services - Information Technology Services - Facilities and Services • Corporate Governance Processes. 	
	<p>Part C: Key Enablers</p>
<p>2. Demonstrating leadership, innovation and enterprise in our activities</p> <p>3. Knowing the needs of our students, other customers, stakeholders and markets</p> <p>4. Valuing and Investing in our Staff</p> <p>5. Aligning our activities, budgets and other resources with ECU Strategic Plan</p> <p>6. Using data, information and knowledge to inform decision-making.</p>	<ul style="list-style-type: none"> • Governance and Leadership • Knowing and responding to the needs of students, markets or stakeholders • Valuing and Investing in our Staff • Aligning our activities, budgets and other resources with ECU Strategic Plan • Using data, information and knowledge to inform decision-making.
	<p>Part D: Conclusion</p>
<p>7. Improving ECU outcomes.*</p>	<ul style="list-style-type: none"> • Conclusion.

Quality Assurance: Imposition of a Discourse or Sound Academic Practice?

Robin McTaggart

Introduction

The perspective I take in this discussion is influenced by my own academic interest in the theory and practice of participatory action research (McTaggart 1997; Kemmis and McTaggart 2000, 2005). It is not possible to elaborate on that methodological field here, but three key ideas from it are important:

1. The quality of any social practice requires disciplined reflection on the evidence about the goals, processes and outcomes of that practice by the practitioners themselves. I use the term 'practice' here in the broad sense defined initially by McIntyre (1981) which makes broad endeavours such as 'agriculture', 'medicine' and 'education' practices and disallows the distinction which some make between 'theorists' and 'practitioners' in each of those fields. Further, I suggest that individual practices and institutional practice and the relationships among them are immensely complex, mutually constitutive and profoundly interactive at the individual and collective level (Kemmis and McTaggart, 2000, 2005) and Kemmis (forthcoming). Every practice is an expression of a theory or theories, and in this sense every university practice is intended to enact (and test) the theory of the university's view of itself and its role.
2. The quality assurance of any social practice makes accessible to public critique three key aspects of the practice:
 - the quality of the reflection practitioners engage in. For instance, how well disciplined it is by evidence, knowledge of relevant literatures, *systematic* collective critique and expert and peer review.
 - the quality of the evidence used by practitioners to improve their practices on the one hand, and to justify them on the other. For example, how strong is the validity, comprehensiveness and stakeholder inclusiveness? (See Stake 1967, for example.)
 - the quality of the commitment of practitioners to accountability to relevant stakeholders. For instance, what is the balance between the commitment to disclosure and the need for sufficient privacy to engage weaknesses in practices?
3. The quality of a social practice in a particular situation is not assured by adherence to standardised solutions, but rather it is a function of the intelligent interpretation of:
 - direct experience of the practice in the situation and its possibilities and constraints

- potentially relevant theoretical ideas
- research evidence, especially case studies of practices in similar settings
- professional experience
- the ideas of others regarded in the literature as exemplary cases or best practice.

It is important also to state that this chapter expresses my own views, not the views of James Cook University (JCU) or others, except where these are identified.

My own role in quality assurance at JCU has two dimensions: As Pro-Vice-Chancellor, Quality Assurance and Student Services, I am responsible for the quality assurance of the practices in my portfolio in the Academic Support Division. I am also responsible for the coordination of the University's Quality Assurance System and preparations for Quality Audits.

The perspective outlined above invites the question of whether approaches to quality assurance derived from the management field are appropriate to universities. We will see how the 'naturalisation' in public life of the discourses of such quality assurance makes it difficult to begin quality assurance from first principles (Watson, 2003). The case I will use is James Cook University.

James Cook University (JCU): background

Current situation

James Cook University is a multicampus, medium-sized Australian regional university with a broad curriculum and a very strong research focus. JCU is the second oldest university in Queensland.

Some of the features that individually distinguish James Cook University and that help to define its unique combination of strengths, responsibilities, and challenges are as follows.

- JCU is a multicampus and multi-site university.
- It is one of the most successful research universities in regional Australia, and receives high levels of international recognition for a number of its areas of research. It also has a relatively high proportion of research students.
- It is a regional university: about 80% of JCU students come from northern Queensland.
- JCU plays a major part in the enhancement of the intellectual capital of the region. It is the region's premier provider of professional graduates, most of whom choose to practise and work in the region.
- A significant number of JCU students are among the first generation of their families to have gained access to university education.
- JCU has a high proportion of Australian Indigenous students and is particularly alert to the need to enhance cultural and intellectual understanding between Indigenous and non-Indigenous Australians.
- The University has sole responsibility in its very large catchment area for teaching a broad range of disciplines, and it will continue to determine the breadth of its coverage according to strategic decisions informed by changing societal demands and the resources available.

Since its establishment in 1970, JCU has grown rapidly. Today JCU has two sites in Townsville (with the major site at Douglas and a satellite site at Vincent comprising JCU Townsville); a major site at Smithfield in Cairns, comprising JCU Cairns; teaching sites in Mackay, Atherton, Mount Isa and Thursday Island; and joint ventures in Sydney, Melbourne, Brisbane, China, Malaysia and Singapore.

The context for quality assurance

The University suffered a severe financial crisis in the mid-1990s. This crisis was caused by two main interacting factors: failure to meet government load projections; and staffing and capital development expenditures predicated on the availability of funds from the projected load. Recovery from the crisis involved several major strategies. First, the University was required by the federal government to teach a substantial number of students without government support for three years. Second, a redundancy scheme was introduced to reduce operating costs leaving the University with debt repayments of several million dollars per annum up until 2006. Third, to the dismay of staff, funds held in organisational unit and individual staff 'services accounts'¹ were called upon to help offset the crisis which had consumed reserves and threatened to bankrupt the University. Fourth, the University was restructured to reduce the number of small operating units and to locate those that remained in faculty and division structures in order to improve financial control. Five new Executive Deans, two from outside the University, were appointed to lead and manage faculties, and three external appointments of Pro-Vice-Chancellors with cross-university responsibilities were made to lead and manage Divisions. The Executive Deans and the Pro-Vice-Chancellors all reported to the Deputy Vice-Chancellor who, in turn, reported to the Vice-Chancellor.

The effect of these events on staff morale was profound and quite enduring. Almost ten years later, suspicion, anxiety and resentment about the demise of the department structure still surface occasionally. JCU still has a strong policy commitment to devolution of funds and 'devolutionist ideology' remains quite lively in some quarters.

It follows that the idea of the University as a corporate entity was quite weak among staff when discussions about quality assurance began in the late 1990s. Staff were working hard under the dual yoke of University debt and declining per capita government funds. Morale was fragile despite overall University growth which was focused especially on the new medical school and associated health sciences. Unfortunately, improved institutional liquidity did not promise relief for people in all areas of the University.

Internal competition for resources remained fierce and the new management structure was resisted. This occurred despite the obvious fact that the previously weak structure and practice of financial and other accountabilities had been key causal factors in the 1990s debt crisis which almost closed the University.

Somewhat unwelcome were the quality assurance expectations of greater transparency and increased accountability to the new management, and revised governance practices. The memory of the financial crisis and devolutionist ideology combined to drive people's loyalties towards their immediate organisational units. Further, the sheer pressure of work caused by elevated expectations about research performance on top of increased teaching loads led staff

to sequester themselves in order to get any meaningful work done. This strategy may have been adaptive in the very short term, but there was growing demand by government for increased monitoring of performance and competition between universities for government resources. These conditions during the mid to late 1990s required the University to see itself as a corporate entity. External pressures for greater managerial accountability conflicted with the internal tendency for people to disconnect themselves from institutional demands in order to get their daily work done. The post-crisis culture was making it more difficult for the senior management of the University to respond to government initiatives, including quality assurance.

Rhetoric leads reality

The restructure of the University in 1996–1997 meant that staff invested considerable energy accommodating to new combinations of organisational units. Initially, planning and professional effort focused on making the newly created units work. In July 1998, the University adopted a statement titled *Into the Third Millennium* which was prepared by the Vice-Chancellor after wide consultation. This was the first public expression of a newly emergent JCU. The first ‘Millennium document’ defined the mission of the University, its developmental directions, its key principles and major strategies. It became a significant point of reference for all planning and the budget process. It was also a widely read document which evolved, eventually, into a shared understanding among staff about what the University stood for. Subsequent versions were produced in September 2000 and March 2004. The latter third version with the revised title, *In the Third Millennium: Our Future and How We Get There*, was written jointly with the University Council and defined the University’s identity during the formal Australian Universities Quality Agency (AUQA) Quality Audit in 2004. *JCU In the Third Millennium* (pp.2–3) described its role as follows:

The purpose of this document is partly to describe us, partly to guide us, partly to be an influence for change, and partly to be a public declaration of our commitment to deliver certain benefits to the community: It is meant to describe the essential nature of the University, first to help us understand ourselves and second to help others understand what we stand for, what our goals are, and what is the scope of our activities. It is meant to guide us, by providing some principles against which we can judge the appropriateness of a possible course of action, or to help us decide between alternative directions...

This is the first-level document of a cascade of strategy statements, each dealing with a finer and more specific level of detail than the last. This document is intended to set the ground rules and principles within which our operations are selected, prioritised, and conducted. Immediately below this will be the Operational Plan of the University, which will describe in particular how resources will be deployed to achieve our goals. At the next level will be the strategy statements of the Faculties and the Administrative Divisions.

Below these will be the strategy statements of Schools and Administrative Sections. Finally, the individual development pathways that will be constructed by each member of staff as part of our Performance Management Process can be seen as the last and perhaps most important level of our strategy statements.

Earlier versions were not so explicit about the relationship between the Millennium document and practices of strategic planning in the University. The relationship spelled out in the 2004 version was still aspirational. Strategic planning and especially the use of evaluative performance data was improving but was not universal despite good exemplars in Schools, Divisional directorates and the University Council.

Adding another discourse?

During 2002 and 2003, in the lead up to the AUQA Quality Audit, the University was faced with a dilemma. Strategic planning was in its infancy and its conceptual resources were still rather weakly embedded in the University. The problem for JCU was how to embed the idea of quality assurance while acceptance of the discourse of strategic planning was still resisted as 'management speak'. The Senior Management Group decided to build quality assurance as part of that planning discourse. There was to be no additional specialised language for quality assurance. Rather, quality assurance was to be accomplished by improving existing planning and evaluation structures as well as the use of evidence in planning. A wide range of evidence was used in the evaluation feedback loops for many University practices but this was far from universal or systematic. There was general acceptance of the principle driving the cyclical evaluation of existing practice, so treating quality assurance as an expression of sound academic practice made logical and rhetorical sense. Staff welcomed the approach because it seemed sensible, was not an imposition, provided a way of dealing with an external pressure, and could easily lead to more rational and coherent practices. The imminence of closer monitoring of research performance and the emerging inevitability of teaching being treated the same way made it possible for staff to think about personal and University performance together. This was a long way from good data use in Performance Management Plans, for example, but consciousness of possibility, perhaps even inevitability, was present. The discourse of strategic planning in its general sense did not seem to conflict with the language people were using about practice, but that is symptomatic of the issue I have mentioned.

Some rhetorical precursors

Two internal policy initiatives had paved the way for thinking about a quality assurance approach. They were the DEST requirement for the production of a 'research and research training management plan' and the first steps taken by the University to adopt and implement its first 'teaching and learning plan'.

RESEARCH AND RESEARCH TRAINING MANAGEMENT PLAN

One aspect of the research and research training management plan was a policy commitment for Schools to develop research and research training plans as part of their role in implementing

the University Research and Research Training Management Plan. The Dean of Graduate Research, Professor Helene Marsh, designed the format for these plans.² Its clarity and utility led to its adoption for strategic planning in many practices around the University. The Research Training Strategic Plan identified the University’s mission in research training and four themes: reputation, engagement, self-determination, internationalisation and institutional management. The themes clearly linked the Plan to the Millennium documents. The Plan also specified a series of objectives for each theme, a number of strategies to achieve each objective, responsibilities and timeframes, associated documentation, resources required and key performance indicators. Versions of the tabulation began to be used throughout the University. The basic heuristic appeared in several subsequent guises.

The extract and tabulation below was an example used subsequently to naturalise the use of some basic terminology during the preparation for the quality audit. The objective used was from an early version of the Learning and Teaching Plan:

Towards a QA Plan

What does QA look like when we map it out? If we use an example from the University Teaching and Learning Plan it would look something like the table below. I have chosen just one objective and one of the strategies we use to achieve it... Next, I suggest some of the relevant documentation and policies which ‘drive’ (or might drive) the quality of the relevant practices. The people with responsibility for the implementation of the policies and the use of feedback from the QA processes are identified. Remedy for some gaps in current practices follow in the form of ‘changes necessary’, and the final box shows the performance indicators which help inform the judgement about whether the strategy (obviously in concert with others) is working.

Term	Example
Objective 1	To provide <i>University-level</i> educational opportunities for students from northern Queensland, other parts of Australia, and internationally.
Strategy 1	Ensure students are taught by active scholars, researchers and professionals.
Documentation & Data Sources	Position advertisements and job descriptions Promotion criteria ‘Active researcher’ criteria Course Review principles
Responsibility and Timeframe	Executive-Deans, Heads of Schools Human Resources Office to monitor Academic Promotion Committee annual report to Academic Board and Senior Management Group
Changes necessary	Academic Promotion Committee annual report to Academic Board and Senior Management Group ‘Active researcher’ list compiled by Research Office

Performance Indicators	Proportion of teaching staff ‘active researchers’ Student Feedback about Subjects (SFS) Student Feedback about Teaching (SFT) Course Evaluation Questionnaire/ Graduate Destination Survey Course Review favourable comment
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The original heuristic produced by the Graduate Research School was utilised primarily by Schools, but its use spread into other areas. Eventually it was a commonplace expectation that all organisational units linked to the core business of the University would:

- prepare a preamble or mission statement linking their specific practices to the features of the Millennium document
- identify six to ten objectives for the organisational units
- describe three or four strategies to achieve each objective
- identify the key staff members responsible for implementation, monitoring and report-back
- describe any additional changes or resource deployment needed to effect the strategies
- identify performance indicators, including corporate indicators where these were appropriate to the level of the organisational unit.

Gradually, preparation for the approaching quality audit focused staff attention on the need for them to know the Millennium document and to be able to relate all practices of the University to it. The ideas of strategic planning and the key elements of quality assurance were slowly melding.

Teaching and learning plan

The earliest discussions of quality assurance at the University occurred in 2001 during the formulation of the Teaching and Learning Plan by the Academic Board. At this time, the idea of the Australian Universities Quality Agency (AUQA) had still not been created, hence its expectations with respect to quality assurance and quality audit could not be known. Nevertheless, there was a growing expectation that quality assurance for teaching and learning would be important in the AUQA quality audit. The Academic Board accepted the view that a philosophy of quality assurance was an important consideration for teaching and learning. A view of quality assurance was sought out to address concerns about importing another specialised discourse, this time of quality assurance, as well as concerns about the amount of work such an imposition would cause.

The position on quality assurance adopted was informed by work done by Professors Tony Becher and Maurice Kogan for Southern Cross University (SCU) (Becher and Kogan, 2000). Their plan for quality assurance was part of a confidential report for SCU, so JCU sought and received permission from SCU and the authors to adapt features of the report for use at JCU. Of particular use were what they termed the ‘Basic Principles of Quality Assurance’ and ‘Fundamentals of the Method of Quality Assurance’. These were integrated with other

concepts to articulate what became known as the ‘philosophy of the quality assurance system’. This provided the key conceptual wherewithal for linking the levels of theory and practice extant across the levels of the University.

The Becher and Kogan report was consonant with my own views, with the emerging culture of a regenerating JCU, and with the pragmatics of what was feasible. This led the Academic Board to adopt in the earliest JCU Teaching and Learning Plan a version of the following position on quality assurance.

The philosophy of the quality assurance system

The Quality Assurance System of the University is a structured manifestation of good academic practice, which describes and builds on existing quality assurance and control processes in the University. The objective of the Quality Assurance System is the establishment of cyclic processes for planning, enactment, feedback and renewed planning, which promote and emphasise quality enhancement through the generation of a collective self-critical and self-reflective attitude. This attitude is disciplined by attention to the goals of the University and by data collection and analysis.

The structure of the Quality Assurance System ensures that feedback loops link with those people who are in a position to effect improvements in teaching and learning. The system recognises that quality enhancement must often aim at goals that are not easily described and, therefore, are less easily measured. Accordingly, where it is appropriate, the Quality Assurance System uses qualitative assessment to impose a reasonable degree of impartiality and objectivity by referring directly to specific goals and whether or not they have been achieved. In other words, the Quality Assurance System describes processes designed primarily to enhance practice, but with a view to accountability for outcomes wherever these can be defined clearly. The Quality Assurance System should show the University and its community that disciplined self-reflection is clearly described, reasonably systematic and demonstrably comprehensive. The investment of resources in the Quality Assurance System must be mediated by its contribution to the enhancement of teaching and learning and to public accountability.

Quality as ‘fitness for purpose’

The meaning of the term ‘quality’ is somewhat contentious, but a commonly used definition gives a real sense of the scope of the concept. The British Standards Institute (BS 4778) defines quality as: ‘The totality of features of a product or service that bear on its ability to satisfy a given need.’ ‘Quality’ defined in this sense suggests that the quality of teaching and learning intersects with most practices of the University. The University formulates its purposes to address what it sees as community needs. Educational and research programs are devised and implemented to meet these purposes and one aspect of their quality may be described as their ‘fitness for purpose’. In other words, the University must be clear about its purposes and have appropriate research, research training and teaching and learning plans to provide the points of reference by which the quality of its activities can be judged.

Quality of purpose

Clearly purposes may be of different quality too, and purposes must in some way be covered by the quality system a University puts in place. Quality of purposes is assured through the engagement of the University with its community, local, national and extended, including links through the membership of the University Council, and links with professional, employer, union and disciplinary bodies. These links for the quality assurance of purposes are described as an aspect of the Management of Quality. When we think about quality as ‘fitness for purpose’, purposes become the central point of reference by which quality is judged: ‘Are we doing what we said we would?’, and in concert, ‘Is it still worth doing?’ The possibility of different purposes (not necessarily implying different quality) means that ‘best practice’ in universities with similar purposes is an important point of reference.

The reference to other universities is important for another reason. The mediation of the interests of the community stakeholders (including government) is only possible because the community of scholars in each of the disciplines and fields come together, typically through academic boards and senates. Through history this dialogue forges and reforges the idea of what counts as a university and the continuance of authentic intellectual life.

Purposes of stakeholders

The concept of ‘service’ in the definition of quality above requires amplification here too. In education, the service is not merely performed for the students, the service is performed for others too. Students come to university to be ‘transformed’ and the transformation is represented in different ways in different discourses; ‘value adding’ is one representation, ‘empowerment’ is another. The University acts for the student, and for the community, through its relationship with the professions for example. So ‘fitness for purpose’ relates to purposes for the community and to individuals, to a variety of stakeholders. Therefore, quality assurance has four key aspects:

- i. clarifying what is happening in our practices
- ii. clarifying what our collective purposes are
- iii. checking practices against purposes reflexively
- iv. subjecting all of these to informed, disciplined and systematic critique.

The Quality Assurance System must, therefore, describe all of these.

Policy for a Quality Assurance System³

BASIC PRINCIPLES OF ACADEMIC QUALITY ASSURANCE

The basic principles guiding quality assurance in the University are:

1 Accountability to University and community

The University, through its Academic Board has a public duty to ensure that its academic practices are of high quality. The processes by which the quality of core practices is examined must be comprehensible and transparent to stakeholders. These processes must also be generally acceptable and accessible to all those involved and affected.

2 Systematic practice with justified variations

The Quality Assurance System should be generic as far as possible, but should allow variations to address the different characteristics and needs of different disciplines, fields, areas of study and other practices.

3 Complementarity with academic work

The Quality Assurance System should complement responsible and productive academic work practices. It should not be mechanistic or waste time, but should follow and nurture the responsible and productive academic work of teaching.

Fundamentals of the method of academic quality assurance

What are the fundamental features of an academic quality assurance process? There are several key features reflecting the work of professionals in other areas that might be called upon by academics (Becher and Kogan, 2000).

1 Documentation

The practice of quality assurance must be documented to ensure that stakeholders and others involved and affected are thoroughly informed about expectations, the practice itself, its outcomes, and its links with the improvement of practice.

2 Peer review

The practice of quality assurance must make use of peer review. In practices where responsibility for quality is distributed among staff with different experience, expertise and authority, the term 'peer' must be interpreted broadly. A 'subject' for example is not simply a responsibility of a staff member, but of a discipline, a school, a faculty and an academic board. The unifying value which underpins peer review in teaching and learning is the quality of provision to students.

3 Client satisfaction

Client satisfaction means commitment to the idea of the 'client' and the client's rights to service and to provide commentary on the quality of the 'service' which is provided. The most obvious client of 'teaching' is the student, but there are also other clients, sometimes described as stakeholders: the professions, people teaching related subjects, the community and so on. These may not be privy to all or any of the information directly involved in the quality assurance process, but must be satisfied with the general outcomes and more especially the validity of the processes themselves.

4 Negotiation

The means for meeting the requirements must be negotiated among participants, especially to ensure that practices are not distorted by the commitment to specific ways of describing or summarising them. For example, distortion might occur through narrow or totalising use of concepts such as 'objectives', 'performance indicators' or 'key performance indicators'.

Objectives and performance indicators

An important feature of a quality assurance system is the linking of objectives with performance indicators. A way to achieve this is to tabulate:

- objectives for the area, whole university, faculty or school for example
- strategies for the achievement of each objective
- documentation of policy which expresses or informs the objectives and strategies
- responsibility and timeframe for strategy implementation, evaluation and revised strategies
- performance indicators (qualitative or quantitative) which enable judgement of the adequacy of strategies and the appropriateness of objectives.

Convergence

The convergence of this philosophy of quality assurance, the widespread adoption of the Millennium documents, and the emerging practices of strategic planning each provided the working basis of a quality assurance system. Considerable effort was then made in the lead up to the quality audit to ensure that staff were aware of the links between disciplined reflection on their individual professional practices, the collective practices of their school or service area, and the corporate practices of the University. There was a sense that the University was giving a name to practices already in place, but the ready translation between individual, collective and corporate practices also made it easy to raise consciousness about weaknesses and the ways in which the University needed to remedy them. At this level, at least, the University was able to make use of the potentially oppositional discourses of reflective practice to develop quality assurance practices.

Three key documentary resources were used to bring rhetoric and reality into closer alignment through training workshops and internal communications:

- Quality Audit: What Everybody Should Know⁴
- Quality Assurance: University Objectives and Your Role⁵
- A Sample Quality Assurance Plan⁶

A fourth document, 'Quality Assurance Checklist for Strategic Plans', represents the final convergence between the commitment to strategic planning and the discipline of data to inform reflection in cycles of planning, action, observation, reflection and further planning, which are the cyclical features of action research. The text and checklist reproduced below illustrate the last phase whereby stipulation rounds off the earlier education phases:

The purpose of this checklist is to ensure that Strategic Plans for Faculties and Schools and Divisions and Directorates and other organisational units meet the basic criteria agreed at the Vice-Chancellor's Planning Conference. Note that every criterion may not be relevant in every case, but no criterion should be dismissed lightly as 'not applicable'. Commitments in these documents *must* happen, escape clauses such as 'if funding is available' should not appear. Pro-Vice-Chancellors and Executive Deans

are expected to authorise *all* of the Strategic Plans for different levels of their respective areas and submit copies to the Vice-Chancellor's Office prior to lodging copies in the Quality Assurance Office by June 30, 2003.

Criterion	Adequately represented?
Clearly refers to ⁷	
<ul style="list-style-type: none"> • <i>Into</i> (or preferably <i>In</i>) <i>the Third Millennium</i> 	
<ul style="list-style-type: none"> • teaching and learning 	
<ul style="list-style-type: none"> • research and research training 	
<ul style="list-style-type: none"> • support services for students 	
<ul style="list-style-type: none"> • service to the community and region 	
<ul style="list-style-type: none"> • the quality assurance <i>system</i> for the area 	
<ul style="list-style-type: none"> • governance practices relevant to the area (committees involved ...) 	
<ul style="list-style-type: none"> • administration and financial management 	
<ul style="list-style-type: none"> • assets and facilities management 	
<ul style="list-style-type: none"> • human resource management 	
Clearly states	
<ul style="list-style-type: none"> • aspirations, goals and objectives 	
<ul style="list-style-type: none"> • key strategies for each objective (including continuing operating strategies as well as new initiatives) 	
Clearly identifies	
<ul style="list-style-type: none"> • documentation, including policy, principles, legislation and guidelines that act as drivers to the objectives and strategies (including documentation that needs to be developed) 	
<ul style="list-style-type: none"> • data collected or needed to inform the development, practice and outcomes of each strategy (including University-wide data such as SFS, SFT, CEQ, GDS, or data specific to the area) 	
<ul style="list-style-type: none"> • performance indicators (and standards or benchmarks) used to evaluate the achievement and effectiveness of the objectives 	
<ul style="list-style-type: none"> • staff responsible for acting upon the feedback from data collection and other quality assurance processes, reporting mechanism 	
<ul style="list-style-type: none"> • systematic or regular internal and external mechanisms in place for reviewing practices (and current and relevant reports of these such as course accreditation, course advisory committees) 	
<ul style="list-style-type: none"> • deficiencies identified by recent reviews of practices and processes and resultant changes 	
<ul style="list-style-type: none"> • specific improvements sought, performance indicators and deadlines, reporting mechanism 	

Gaps

There is an obvious tension between the commitment to devolution and the need for corporate reporting. Aggregation and selection of data for corporate use often obliterate the differences which are the wellspring of innovation and improvement in smaller organisational units. Monitoring of performance can have a couple of distracting effects. First, it can create angst which militates against experimentation; and second, it can distort practices towards what is monitored and measurable. Nevertheless, corporate monitoring of some kind is necessary if certain conditions apply:

- a. if external funding is a function of institutional performance
- b. if internal budget processes are to be informed by performance of organisational units
- c. if the senior management and governance of the University are to be informed about the aggregated effects of the practices of the University.

The latter points especially are fundamental to quality assurance.

In its 'self-review' of quality assurance, JCU identified a wide range of strong practices and some weaknesses. These included some lack of clarity about feedback loops in several areas and especially systematic monitoring at the corporate level. There is insufficient space to discuss these here, but they are described in the JCU Quality Audit Performance Portfolio Portfolio.⁸ The response to the University's self-review by the AUQA Audit is also available in the public domain. The acceptance throughout the University of the need to implement the findings of its own review and of the Audit Panel's suggestions is notable. The University community has accepted the need to improve corporate monitoring of key indicators of learning and teaching and research performance in particular.

Enculturation or compliance

The settlement of the principles, outlined above, into the culture of the University is far from complete. One's view of this depends upon discursive preference, an emphasis on the literature of disciplined reflection or on conformity with the teachings of organisational management.

There is still a sense in some minds that 'compliance' is what is being sought rather than a collective sense of identity, aspiration, and mutual accountability. Staff development is still required to assist the University community to use corporate indicators and more specific outcome indicators efficiently and wisely. Some staff still regard quality assurance as the imposition of extra work, rather than disciplined self-reflection to achieve improvement and appropriate levels of accountability to the University and general communities. Integral to this is performance management which is still not utilised well by managers or by staff, not least perhaps because of the tensions I have already mentioned.

It is difficult to contemplate an end to this process. Indeed the right kinds of process can be regarded as the goal. What we do have is thoughtful contestation and debate about the nature of strategic planning, monitoring, key indicators, the cascade of University imperatives and reflective feedback loops. These are distributed through the levels of practice and governance, from Council, Academic Board, Senior Management, organisational units and the individual performance management program. There is some change in institutional culture.

Of course neither quality assurance nor strategic planning are the phrases on everyone's lips. However, it is fair to say that the basics of quality assurance are reasonably well understood and practised. The basic elements of quality assurance developed during the quality audit preparation were expressed in the following questions:

- What are you trying to do in your work (referring to your unit's goals)?
- How do you know if you are successful? What evidence do you use?
- How is the evidence used to bring about improvement in your work?

With reference to *In the Third Millennium*, staff in management roles and all academics were expected to be able to describe:

- the goals of their organisational unit and why they have them
- the policies and legislation that are relevant and how they are used
- the strategies and practices in place to achieve the stated goals
- how they know whether they are achieving their goals (that is, what evidence is used)
- who is responsible for:
 - collecting and interpreting evidence,
 - acting on it (improvements) in practice and reshaping goals
 - informing (and getting information from stakeholders about what has happened).

The approach to quality assurance made people more adept at thinking and speaking about their work in these terms. The audit also functioned as an external threat with the effect of creating solidarity unseen since the financial crisis of the mid-1990s. This affirmation of corporate identity combined with systematic outworking of embedded good academic practice has strengthened James Cook University. Nevertheless, it will be the larger national machinations that determine its fate.

Quality Assurance at the University of Sydney

Ann Brewer

Overview

This case study focuses on the process of developing the quality assurance strategy and model at the University of Sydney during 2003–2004. Quality needs to be grounded in both the minds and actions of all participants — management, staff, students and community stakeholders — for it to realise effective outcomes for the institution. Collaborative knowledge networks assisted in adjusting staff expectations more successfully than if the quality plan had been simply imposed by senior management. The quality movement is an emergent order; a process by which staff work together to both understand and seek resolution to problems and in so doing, embed new knowledge and norms as it evolves (based on Polanyi 1969). Consequently, the quality strategy led to competing networks of knowledge within the University. The case study shows how the social construction of quality assurance — the ways in which the model and process was shaped and used as a function of a complex interplay of social and cultural factors — had an important influence on the University.

Introduction

The Australian Universities Quality Agency's (AUQA's) concept of quality 'fitness for purpose' was adopted by the University of Sydney (the University) by means of articulating its goals of research, academic and community outreach (University Plan 1999–2004).¹ The aim of the University's quality assurance strategy was developed and monitored by the Quality Advisory and Coordination Group (QACG), which was established by the Vice-Chancellor in 2001 to ensure the effectiveness of its core activities, to learn from best practice, both locally and internationally, as well as benchmark against leading research universities. The strategy included:

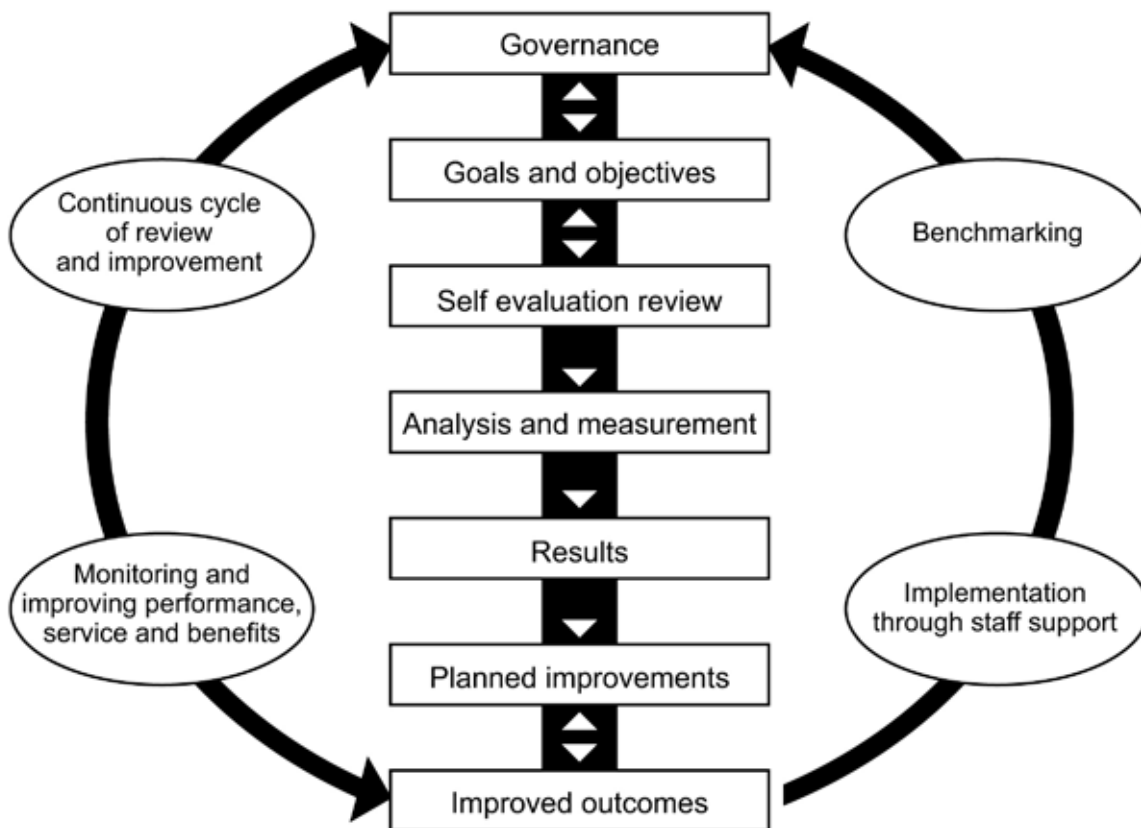
- evidence-based outcomes, intrinsic to the work of all staff
- national and international benchmarks used appropriately to evaluate performance
- rigorous peer review and critical self-evaluation leading to planned improvements.

The attainment of the principle of excellence in research and academic pursuits, with the intent to establish outstanding standards of performance, underscored the strategy in this case.

Quality assurance framework

The quality assurance model shown in Figure 1. has five central components, including governance through the University’s Senate and Academic Board; effective management by strategic performance objectives and indicators; critical self–review involving analysis and measurement; identification of achievements and strengths; and the development of plans for improvement and implementation. The quality assurance model indicates that the continuous cycle of reviews engaged academic and general staff, support and recognition for achievement. The initial step in evaluating quality outcomes is to compare these to the original specification to see if a relationship is observed between goals, processes and outcomes. As with all successful transformations, the Vice-Chancellor together with the Senior Executive and the deans provided an unambiguous leadership of the quality movement from its inception.

Figure 1. Quality assurance model



The task of the QACG is to coordinate the University’s quality assurance and improvement processes, reinforce its quality management systems and ensure that its quality assurance processes were aligned with the principles articulated above as well as monitoring outcomes. QACG advises the Vice-Chancellor on both academic and management processes to implement the quality assurance strategy. It reviews the strategy and ensures that internal processes are coherent with external reporting and audit requirements, using standards appropriate to research-intensive universities internationally. The QACG is chaired by the Deputy Vice-Chancellor (Academic) and its membership consists of senior officers, the Chair of Academic

Board and senior representatives of administrative and academic areas. The Academic Board provided a significant parallel approach in regard to the coordination of the reviews of faculties.

In this case the approach to quality eventually led to the surfacing of a series of voluntary, 'knowledge networks' among staff. These networks have their roots in Revans's (1980) work, based on a philosophy that staff in a collaborative process learn most effectively when working on real-time problems in a context which they know best. Critical reflection was an important element harvested in the process, whereby staff learned from each other and in so doing, examined their own expectations, assumptions, practices, past, current and future (Mezirow 1990; Marsick and Watkins 1992; Pedler 1992; Weinstein 1995). Critical reflection also went beyond personal assumptions and, in some instances, led specifically to the examination of University-wide norms and mores.

The remainder of this article is divided into five sections: methodology, institutional history, narrative and synthesis. In the methodology section, the approach to data collection is outlined as well as a summary of demographic information in regard to case-study participants. In the third section, a brief background of the quality preparation and its major stages is outlined with a representative sample of staff reactions to the quality program. In the final section, the threads are pulled together by addressing two key questions that framed the analysis, utilising concepts from two theoretical frameworks.

Case-study methodology

A case study is based on 'qualitative research involving the studied use and collection of a variety of materials, routines, problematic moments and meanings' (Denzin & Lincoln 2000). Absolute authority on the 'facts' and past events is impossible to determine (Stivers 1993) as it is impossible to present the whole narrative and every perspective completely such that there would be total agreement among the participants. Instead of recounting the events an interpretative perspective is given. Further, the exclusivity of this case study does not preclude it from being generalised to a broader context for at least two reasons:

- many aspects of this story will resonate with other's experiences within their own organisations
- an attempt is made to generalise this case study by framing its conclusions in terms of theoretical perspectives from two sources: Jordan (1999) writing on the characterisations of 'elites' and Bourdieu's work on the sociology of educational setting, especially its underlying notions of symbolic and economic capital and habitus (Bonnetwitz 2002; Bourdieu 1988; Bourdieu & Passeron 1990).

To anchor this case study several antecedent events are outlined as well as addressing the following questions:

- When did quality assurance take hold?
- What was the rhythm of this change?
- Was the approach incremental, pioneering or innovative?
- Did the change occur as a consequence of the AUQA audit or was it already evolving?

Quality movement

The quality movement began in earnest in the University in 2002 through the ongoing faculty reviews and by 2003 the pace of change proceeded quickly towards the preparation strategy for the AUQA audit in 2004.

The Academic Board introduced a process of cyclical reviews of all faculties in 2001. The cyclical reviews were aimed at assisting the University in safeguarding and enhancing the quality of its core activities of teaching, learning and research. The reviews intended to support faculties in:

- ensuring the effectiveness and sustainability of their quality assurance arrangements through peer review of processes, outcomes and the evidence that demonstrates their effectiveness
- identifying and evaluating strengths and weaknesses
- maintaining a systematic and continuous cycle of planning, monitoring and improvement
- evaluating outcomes in relation to the University's Goals
- promoting good practice and ownership of quality assurance activities throughout the University
- fulfilling the University's requirements for both internal and external accountability.

There were two phases in the Academic Board Review process. Phase One completed in 2002, focused on all faculties' teaching, learning and research training. Each faculty provided the Academic Board with a self-evaluation report (SER) of its academic quality assurance systems, addressing the management of quality in teaching and learning. The SERs examined the processes for ensuring the integration of research with undergraduate teaching, the quality of student assessment, standards, research training, monitoring of student progress and recognition of good teaching.

The SER was a precursor to faculty visits initiated by the Board. The review panel included the Chair of the Academic Board, representatives from other faculties, the Pro-Vice-Chancellors for Teaching and Learning, Research, and Assistant Pro-Vice-Chancellor, Academic Planning and Development. Review visits comprised a series of structured interviews between the review panel and groups of students, staff and the senior officers of the faculty. Phase One reviews disseminated good practice, offered support for improvement, and monitored compliance with Academic Board policies. From 2003 the Board reviews moved into Phase Two, systematically examining actions taken in response to recommendations from the Phase One reviews and the effectiveness of these actions. Phase Two explored faculties' outcomes and quality assurance processes associated with the remaining goals not examined in Phase One.

Faculty review reports were sent out to the Dean of the faculty for a response before being forwarded to the Teaching and Learning Committee and the Academic Board. A copy of the report is placed on the website of the Academic Board. To ensure effective implementation, the QACG monitored the follow-up process on recommendations. College Pro-Vice-Chancellors, together with Deans, took a formal role in identifying strategies, priorities and timeframes for implementing changes arising from the recommendations, measuring the success of the actions taken and addressing resource implications where appropriate.

The review of the administrative service areas of the University commenced in 2003 and continues through a regular cycle. The aim of these reviews are to:

- identify and appraise the quality of services, programs and activities
- examine how well these meet objectives specified in the University's Strategic Plan and in operational plans at the divisional/departmental levels
- evaluate all processes currently undertaken that assure quality and improvements for service, programs and activities.

As with the reviews of faculties, the self-evaluation review is a precursor to review panel visits. The review panel includes the Chair of the QACG, a member of the QACG, an Academic Board representative, a Head of an Administrative Division and an external member. Review visits comprise a series of structured interviews between the review panel and groups of service providers from central and decentralised service areas. Administrative review reports are sent out to the Head for a response before being forwarded to the QACG. A summary of the report is placed on the University's quality assurance website. To ensure effective implementation, the QACG monitors the follow-up process on recommendations. All reviewers are trained before being selected for a panel. At each review, one observer is present to provide the panel with critical feedback on its performance.

An imposed framework for the review of administrative services and for the faculty reviews would have led to the risk of a superficial output. However, in both types of reviews staff were engaged through interaction in developing the appraisal process and aligning their perceptions to those of their clients: students and staff. Most staff opened themselves to investigation and identified examples where practice was good or needed improvement as well as associated risk factors. A sense of ownership and advocacy by staff followed and, in some cases, with immediate instigation of improvements. Surprisingly, the process led to a strengthening of commitment to the University Plan, which has been further supported throughout this process as a direct consequence.

During the early stages of 2003 a number of factors were driving quality, including increased competition within the sector, the issue of full-fee paying places and most significantly perhaps was the ever-growing internationalisation of the University; noticeably through the influx of international students, particularly postgraduate students. All these factors were associated with the growing trend of consumerist behaviour by students, who started voicing their dissatisfaction for unmet expectations when this occurred. These factors coupled with the demand for enhanced research training were the main challenges to quality assurance at the time. Further there was a sense that the University could be 'doing better', which became a critical prerequisite for change. This climate coupled with the pending external audit led to a sense of responsibility that every staff member could respond to.

Consultation with students and staff

Consultation with both students and staff was extensive during the review processes. A series of search conferences with staff and network meetings with managers were conducted, bringing diverse groups of staff together to build common ground as they evaluated core services and planned specific improvements. Genuine commitment was the aim rather than

compliance to a University directive. Open consultation provided a process for staff in particular to voice their concerns and expectations and to realise the extent of their responsibility in exercising active and innovative problem-solving. All meetings followed a pre-planned structure based on the SERVQUAL survey developed by Parasuraman, Zeithaml and Berry (1985) to measure a disparity between the staff and, where relevant, students' expectations and the outcome of their various experiences as well (Philip & Hazlett 1997). Feedback from students was provided to the service provider so that they could incorporate it into their self-evaluation review. Review teams interviewed students as they visited each faculty during the Academic Board reviews. A network of senior administrators responsible for the delivery of Service Quality Assurance (SASQA)² was established to review, assure and improve the quality of administrative services. More specifically, SASQA:

- provided shared leadership for the Administrative Services Reviews
- facilitated transmission of knowledge between areas
- formed a learning network for its members.

In search conferences with students, it was found that they acted both as consultant and 'quality inspector' to the university and a reporter to others. Students subjectively evaluated both good and poor course and service delivery, and offered suggestions and communicated with other potential and existing students about the service or the university. Students also communicated with other students even when they did not know each other. For example, when:

1. directly asked for information in the form of advice (e.g. when asked if they have ever experienced a particular course or lecturer) or an evaluation (e.g. when asked how that course was), and
2. giving unprompted or unsolicited advice, expertise, and complaints (e.g. when answering a question for a student that a service provider at a desk could not).

Similar to staff, students became active advocates, promoters, or defenders of courses, lecturers or services. On the other hand, at times, negative word-of-mouth was used by students to voice dissatisfaction to others about a course or service experience.

Case analysis

Two questions are key factors in structuring the analysis of an effective quality movement:

1. What contributed to the successful outcome of the quality strategy?
2. What are the ongoing lessons learnt by the University?

ENSURING KNOWLEDGE TRANSFER FROM STAFF AND STUDENTS

Staff and students as clients are uniquely situated to offer information to the University and potentially enhance its knowledge capital. Noticeably, most students were unaware of institutional plans or goals. The meetings with students and staff showed that personal interaction between clients and providers as well as the support and advice provided by them was an important feature of a high-quality program and service. Also evident from the meetings was that most people had idiosyncratic reactions to the same experience. For example, predicting when

course or service attributes would meet or fall short of their expectations. This issue is far from straightforward, particularly in the case of students. Students were not always sure what to expect due to a lack of direct experience as they moved from one transitional learning stage to another. For example, most courses are designed around a core purpose and academic standards which are aligned to relevant, professional standards and are approved progressively through both the Faculty and Academic Board structures prior to implementation locally. While students are invariably engaged in the formal approval process, usually in a representative capacity, they can only conclude post hoc that what was received was 'fit for purpose' or not. These issues need to be considered in planning, program development or approval.

TIMING OF MEASUREMENT IS AN IMPORTANT CONSIDERATION

For the purpose of convenience and guaranteeing a response rate, evaluations are most often administered at the immediate conclusion of an activity, e.g. at the end of a course or unit of study. At best, this method measures immediate satisfaction levels and is uncertain in its valid assessment of the transfer of the effects of the activity into the actions or attitudes of the participants which is 'real' learning. Data collection conducted instantly at the conclusion of an activity is predisposed to the 'Hawthorne effect', whereby the short-term effects of an intervention appear to be present as a result of the factors associated with the evaluation itself, and are not due to any direct affect of the assimilation of the activity outcomes (Roethlisberger and Dickson 1939).

RETHINKING STUDENT EVALUATION

Moreover, a course may meet its specified purpose, however, the student's judgement of its quality may be heavily influenced by extraneous factors, e.g. pre-enrolment expectations, personality of individuals involved in the course. The incidence of this is particularly important because numerous studies have found that the perceptions component, by itself, possesses stronger psychometric properties than say a measurement of 'fitness for purpose' gap (Brown, Churchill & Peter 1993; Cronin & Taylor 1992). For example, students with initially favourable expectations appear satisfied even when disconfirmation was negative and, conversely, initially unfavourable expectations appear to result in dissatisfaction even when positive disconfirmation occurred. Student evaluations of a course experience emerged more as a measure of how their expectations and perceptions of a total learning experience were satisfied rather than an objective measure of the 'fitness for purpose' gap. Hence, it may be time to rethink methods of student evaluation.

PERFORMANCE MEASUREMENT

High-performing groups, which are at times competing with each other, set about linking standardised measures and outcomes in order to report them. Competitive pressures effected change among all staff as they employed measurement, transparency and accountability to realise breakthroughs and discover even better ways to do things. Performance and measurement, consistent with work practices and continuous improvement, is gradually modifying the

University culture and providing the vision to spot new opportunities and new ways of doing things, including the integration of new technologies. Performance management and development became a significant part of the process even though some staff remain concerned about it. Success was based on awareness that information and knowledge drawn from performance measurement at both macro and micro levels of the institution help create an understanding of what works and does not work. Measurement creates a process of analysis, a feedback loop, whereby knowledge is organised in quantitative terms and also serves the function of making information objective, public and transparent. Sharing the information allows everyone to focus on the common challenge at hand and assess each individual contribution. Performance measurement is a necessary component of the discovery process itself, rather than a scientific means.

GUARANTEEING STAFF ENGAGEMENT

Success was dependent upon a high level of staff cooperation by providing a firm stake in the process. The majority of staff have a great sense of pride in working for the University. As an aside during the AUQA Audit, the University approached numerous community groups to represent the University and again a strong sense of pride and loyalty was self-evident among this group. It would seem that engagement by both staff and community is something that institutions may take for granted and should use more strategically wherever possible.

Collegiality was an important theme as staff knew that any suggestions would be listened to and adopted if widely accepted. There was a consensus of goals developing through the interactions between staff and students. As the quality movement progressed, team members were bouncing ideas off each other both in the formal and informal meetings held in their schools and organisational units. They debated the issues and would analyse them until they felt satisfied with the outcome, leading to implementation of the suggested change in many cases. The process of this led to actual behaviour change in the space where learning, research and administration was done. One participant wrote to me: 'it's been a lot of fun', another wrote: 'I have learnt more about the University during this period than anytime before...' Closer-knit relations were forged, noticed by others not immediately involved. Coordinators of the process had many requests from staff who wanted to become actively involved in the process and contribute to the AUQA Audit, including meeting with the Panel, which was a complete turnaround from the concern, or in some cases, resistance that had been previously felt.

Collegiality, a combination of identification with academic values, collaboration and communication were the hallmarks of success of quality assurance at the University of Sydney. First, despite the complexity of preparing a large number of groups and the inefficiency of including diverse viewpoints, interested staff, students and community were able to take an effective stakehold in the process rather than simply become its consumers or, at worst, bystanders. Second, collegiality led to a strong sense of affinity and even trust among staff which is essential to an effective preparation for an audit. Third, the capacity of the University to appreciate and use it to the advantage of the process was another important example.

NORMATIVE MATCH BETWEEN UNIVERSITY VALUES AND QUALITY

As the University's approach and the AUQA audit is based on quality as 'fitness for purpose', this is associated with the dominant approaches to public administration, and its implementa-

tion not surprisingly provoked resistance. In the early stages of its implementation and in the roll out of the preparation for the AUQA audit, a number of staff were at first unreceptive to the quality efforts, characterised by some as ‘managerial gimericky’. Some professors and researchers complained at times about being distracted from their work. According to institutionalism, the implementation of change incites opposition if the values underlying the reform diverge from the basic mores of the University (March & Olsen 1995). Some academic staff expected there to be a normative mismatch between the quality assurance model used and academic values. The rationale for this was that the planning goals, the instruments to quantify and the measurement of results were all about efficiency and value for money, and some staff saw this as eroding academic values and opposing collegiality. The way to overcome this was to ensure that the planning and measurement was conducted by staff aligned to their teaching and research in their own workplaces, with peer-based reviews. Collegiality was underscored and used to de-emphasise a top–down approach.

COMMUNICATING THE PROCESS

Communication was essential. It was important not have anyone outside the communication loop, so the University introduced a Quality website with progress updates. In addition to the comparative external loops created by a competitive sector, internal feedback processes were also essential to the process of discovery. Demonstrable evidence of progress towards goals as complex and multifaceted as those of a university is difficult and it requires the development of new ways to facilitate feedback and transparency to identify the most effective way forward.

QUALITY AS UNIVERSITY POLICY

Quality became a policy of the University and was led by a series of ‘intrapreneurs’ or change agents who led the movement locally. The resistance to change was overcome because the analysis of quality outcomes showed that the strategy was taking hold and was working towards the core values and goals of the academic pursuit.

Conclusion and lessons learned

Understanding the social construction of quality assurance — how the model and process was shaped and used as a function of complex social and cultural factors (rather than by any attribute associated with quality itself) — had an important influence on the University.

Adeptness at managing University structures and processes was vital to the transformation of both outcomes and attitudes into a collegial location, which spanned academic disciplinary boundaries and administrative boundaries, as well as a site of resistance and accommodation, thereby convincing the ‘quality cynics’. It required the cultivation of many interdivisional, faculty, school, discipline and administrative stakeholders. Knowing how university politics work, especially their implicit, rarely acknowledged aspects, seems essential not only to quality assurance but other major strategies. For example, research; student learning and experience; and community engagement and perceptions were the three issues which are the cornerstone of how the University evaluates itself.

The University was 'a space of positions perceived through the properties of the agents who hold its attributes...and who struggle, with arms and powers capable of producing visible effects to take or defend them, to preserve them unchanged or to transform them'(Bourdieu 1988, p.3; p.76). Each faculty and academic discipline is composed of staff occupying positions as the dominant or dominated class or occupying positions between these two extremes. These 'constructed individuals... exist only in [a particular] network of relations' (Bourdieu 1988, p.3; p.76). Within each discipline there is typically a struggle between the dominant and dominated schools of thought. Capital here is knowledge that is not necessarily economic-based and includes rituals linked to honour and recognition (Bonnewitz 2002, p.56) controlled (i.e. bestowed and withdrawn) by the dominant group. Related to this form of academic stronghold is an important process in the functioning of any academic discipline that is the normative and implicit ways by which things get done (Lawley 1994), learned and internalised by its students and staff and passed on to the next generation.

The discipline of quality (which is neither management nor business studies) is not bestowed with the symbolic capital of the dominant groups of the institution, although the latter is bestowed with economic capital by the external stakeholders. Over the last two years or so, it became apparent that the dichotomous struggle between these groups is both competitive and complementary. Each is a necessary partner to achieve high quality research, learning, teaching and community engagement.

Quality approaches based exclusively on 'fitness for purpose' need to be combined more explicitly with those incorporating 'meeting/exceeding expectations' and require comprehensive investigation, reliable forms of measurement and detailed analysis of student and staff demands (supported by the findings from Bowen & Lawler 1992; Zeithaml, Berry & Parasuraman 1993). Students through their experience have something to offer and gain from their participation in the learning process. It may be useful to consider students as actually involved in co-designing courses and services. Such an approach already occurs in a number of universities. In Australia and elsewhere, introducing self-service (a form of co-service) into student administration led to significant outcomes, e.g. shortening of service pipelines, integrating processes, reduction in working capital requirements, consequently resulting in sharing and partnering resources. There is less evidence in regard to similar trends in the development of academic programs. Further, if a university can consistently discover or drive student expectations, and meet them, its attractiveness to prospective students and their sponsors seems likely to flourish.

As universities attempt to compare outcomes and performance indicators with each other, it is difficult to compare one university directly with another unless identical evaluation is established. The issue of timing in evaluating progress across institutions is an important and often overlooked dimension in benchmarking. It is difficult to determine when the anticipated quality of an action has or will take effect because numerous factors may influence outcomes. When time is taken into account in relation to quality often it is as a delayed indicator. For example, quality may improve when student satisfaction picks up without necessarily a corresponding increase in progress rates. There is little evidence to assist in specifying the timing, contextual and organisational conditions required if a high-quality outcome is to yield tangible results for a university. If these issues are not understood, they can lead to the

reproduction of goals, performance indicators and processes which, while effective in one university, may be defective in another and need to be modified continuously.

For quality to be effective it needs to be grounded in both the minds and actions of all participants, management, staff and students alike. This is not easy because quality is often perceived as top-down by the very processes it employs. It often uses language and techniques that reinforce differing normative positions, which exacerbate the tension between the broad groupings in a university no matter how you scrutinise them: management, staff; administration, academic; staff, students. The less contact each group has with each other, the stronger their allegiance to a particular group and the perceived opposition between them. If a problem or issue arises and one group is perceived to be behind the initiative, particularly if it arouses little overt interest from senior management, it is often difficult to make any progress. Collaborative knowledge networks assist in adjusting participants' expectations more effectively than if this is imposed by senior management.

Finally, establishing 'knowledge networks' is a learning process that creates, diffuses and modifies knowledge for all participants such as: an adoption of a new belief about causal relationships; an acceptance of an approach when actions lead to intended outcomes; the modification of an existing conviction; the rejection of a previously held belief; or a change in confidence with which participants uphold a principle or set of principles. An openness to 'new knowledge' is essential for ensuring the dynamic adjustment of participants in embedding quality in the organisation.

APPENDIX

WEBSITE REFERENCES FOR QUALITY FRAMEWORKS

Balanced Scorecard

<http://www.balancedscorecard.org/>

<http://www.bscol.com/>

Baldrige National Quality Programme (Malcolm Baldrige National Quality Awards)

<http://www.quality.nist.gov/>

http://www.quality.nist.gov/Education_Criteria.htm

Investors in People

<http://www.investorsinpeople.co.uk/IIP/Web/default.htm>

ISO 9001: ISO (International Organization for Standardization)

<http://www.iso.org/iso/en/ISOOnline.frontpage>

<http://www.iso.ch/iso/en/iso9000-14000/understand/qmp.html>

<http://www.saiglobal.com/shop/script/search.asp>

McKinnon-Walker Benchmarks (Australia)

http://www.dest.gov.au/sectors/higher_education/publications_resources/profiles/archives/benchmarking_a_manual_for_australian_universities.htm

<http://www.dest.gov.au/archive/highered/otherpub/bench.pdf>

Business Excellence Models

Australian Business Excellence Framework (ABEF)

<http://www.businessexcellence.com.au/>

www.standards.com.au/PDFTemp/Previews/OSH/as/misc/gb/GB002.pdf

www.decs.sa.gov.au/quality/files/links/Australian_Business_Excell.doc

British Quality Foundation

<http://www.quality-foundation.co.uk/index.htm>

Consortium for Excellence in Higher Education (CEHE)

<http://excellence.shu.ac.uk/default.asp>

European Foundation for Quality Management (EFQM)

<http://www.efqm.org/>

Singapore Quality Class (SQC) Business Excellence Framework

<http://www.spring.gov.sg/Content/WebPage.aspx?id=891ae682-fca7-4645-b868-3538d0e09902>

QUALITY CONCEPTS

American Society for Quality

<http://www.asq.org/>

Higher Education Academy (UK) — Perspectives on Quality Enhancement

<http://www.heacademy.ac.uk/919.htm>

National University of Singapore — Office of Quality Management

<http://nus.edu.sg/oqm/>

Quality Research International — Quality Analytic Glossary

<http://www.qualityresearchinternational.com/glossary/>

Service Quality

<http://www.acadjournal.com/2006/v18/part7/p1/>

http://www.12manage.com/methods_zeithaml_servqual.html

Total Quality Management

<http://www.managementhelp.org/quality/tqm/tqm.htm>

INTERNATIONAL BUSINESS SCHOOL ACCREDITATION ORGANISATIONS

AACSB

<http://www.aacsb.edu/>

AMBA

<http://www.mbaworld.com/index.php?content=welcome&dcontent=1>

European Foundation for Management Development: EQUIS

http://www.efmd.org/html/Accreditations/cont_detail.asp?id=040929rpku&aid=041029wupz&tid=1&ref=ind

NOTES

Chapter one

- 1 From Australian Universities Quality Agency (AUQA) Audit Manual version 1, 2002, Chapter 19.

Chapter two

- 1 The author acknowledges the assistance of Mr Paul Martin in the development of this paper.
- 2 Based on 2004 figures.
- 3 Successful conversion to the updated ISO 9001:2000 standard occurred in November 2003.
- 4 See for example La Trobe University and Curtin University of Technology.
- 5 Australian Universities Quality Agency 2003, *Report of an Audit of RMIT University*. Available at: http://www.auqa.edu.au/qualityaudit/sai_reports/index.shtml.
- 6 Compliance with the AQTF standards, verified by external audit every five years, is mandatory for maintenance of RTO status (see <http://www.ntis.gov.au/-ntis/howtorto.htm>).
- 7 Based on a Web search and direct contact with representatives in each TAFE institute.
- 8 At the time of writing [September 2005], the EQUIS assessment process was still in progress, with a site inspection visit scheduled for April 2006.
- 9 For further information see the website: <http://www.efmd.be>.
- 10 More information on the QART system can be found in the AUQA Good Practice Database at http://www.auqa.edu.au/gp/search/detail.php?gp_id=1552.

Chapter five

- 1 A 'services account' is a university account into which external income achieved by a staff member can be placed. While it is unambiguously 'university money' and can only be spent on university approved purposes, staff who earned it typically regard themselves as having strong proprietorial rights over it.
- 2 <http://www.jcu.edu.au/div2/rrtmp.html>
- 3 http://www.jcu.edu.au/asd/quality/Idea_of_Quality_Assurance_System.htm
- 4 <http://www.jcu.edu.au/asd/quality/Quality%20Assurance%20booklet%20-%20web.htm>
- 5 http://www.jcu.edu.au/asd/quality/QA_Edge_2002_3.html
- 6 http://www.jcu.edu.au/asd/quality/Sample_Quality_Assurance_Plan_T&L.html#fn0
- 7 Note that each of these criteria refers to a section of the Performance Portfolio submitted to the Australian Universities Quality Agency for the May 2004 Quality Audit.
- 8 <http://www.jcu.edu.au/asd/quality/>

Chapter six

- 1 University Plan 1999–2004 is no longer accessible. For the current University Plan go to the website: <http://www.usyd.edu.au/about/publication/strategic/2006/index.shtml>.
- 2 Senior Administrators' Service Quality Assurance (SASQA).

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— 2002b, *Report of an Audit of Curtin University of Technology*.

— 2002c, *Report of an Audit of Australian Catholic University*.

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— 2003b, *Report of an Audit of the Australian Maritime College*.

— 2003c, *Report of an Audit of Royal Melbourne Institute of Technology*.

— 2003d, *Report of an Audit of Macquarie University*.

— 2003e, *Report of an Audit of the University of Canberra*.

— 2003f, *Report of an Audit of the University of Queensland*.

— 2003g, *Report of an Audit of Swinburne University of Technology*.

— 2003h, *Report of an Audit of Notre Dame University of Australia*.

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— 2005b, *Report of an Audit of Bond University*.

— 2005c, *Report of an Audit of Deakin University*.

— 2005d, *Audit Manual version 2.1*. Available at: <http://www.auqa.edu.au/qualityaudit/auditmanuals/index.shtml>.

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— 2005f, *Report of an Audit of Queensland University of Technology*.

— 2006a, *Report of an Audit of the University of Wollongong*.

— 2006b, *Report of an Audit of The University of Melbourne*.

— 2006c, *Report of an Audit of the University of New South Wales*.

— 2006d, *Report of an Audit of Central Queensland University*.

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