Chapter six – Quality Assurance

Individual universities have in place a range of mechanisms to ensure the quality of their academic programs that have been refined over the years. As well as internal processes to ensure the standards of courses and assessment procedures, universities have made use of peer reviews, input from professional bodies and involvement in national and international networks.

However, reliance on individual universities to address quality assurance was questioned from time to time and by the 1980s pressure had begun to mount for a system-wide approach to quality assurance, especially after the review of efficiency and effectiveness in higher education (Hudson 1986). Calls for a more integrated quality assurance system in the 1990s arose partly from concerns about standards following the significant expansion of the higher education sector and the unification of universities with colleges of advanced and further education. This went hand in hand with a focus on total quality management in industry and a paradigm shift that led to public organisations being viewed, in many respects, as businesses. The concept of higher education as a globalised industry began to emerge.

Between 1993 and 1995 the Commonwealth Government encouraged universities through incentive payments to participate in reviews conducted by the Committee for Quality Assurance in Higher Education. These reviews brought about considerable cultural change in the way universities saw the need for self-evaluation. However, they were also expensive and demanding on the sector. In 1998 a less interventionist approach was put in place with universities required to provide annual quality assurance and improvement plans.

By the end of the decade, both the sector as a whole and government recognised the need for a more system-wide approach to quality assurance in response to the increasing challenges and pressures facing the higher education system. This led to the development of a national quality assurance framework that augmented quality assurance mechanisms already in place at universities in Australia.

This chapter focuses on these developments in higher education quality assurance, especially over the past decade. It outlines the processes put in place by individual universities to maintain quality and early moves to achieve a more systematic approach. It then examines the impact of changes in the 1990s that led to the evolution of a national approach to quality assurance. The chapter concludes with some reflections on the challenges posed by the diversification of delivery systems and providers, the globalisation of higher education and the maintenance of standards, which increasingly are emerging as important issues for the future.

6.1 Traditional approaches to quality assurance

Traditional approaches to quality assurance in Australian universities have centred on their internal processes for monitoring admissions, teaching, learning and assessment; the use of external bodies to validate courses, curriculum and academic standards; and cooperation with other institutions to provide peer reviews of academic work. These components are still a valued part of the quality assurance process.

Internal processes have typically involved, and continue to involve, the setting of standards for admissions; student evaluation and peer reviews; the assessment of new course proposals; the evaluation of course curriculum including regular evaluation of student feedback; and moderation of assessments of coursework. In addition, universities normally review their

courses on a five yearly basis. This process often involves consultation with, and accreditation by, relevant industry or professional bodies in addition to formal assessments by the university. It remains common practice in Australian universities to arrange for professional associations to be associated with program reviews in fields such as accountancy, engineering, architecture, dentistry and pharmacy. Professional accreditation bodies examine the general structure and content of curriculum, academic standards and course length. They establish general expectations concerning entry level to courses, practical experience, subjects to be covered and mode of study.

Universities have always prized academic freedom and the notion of a community of scholars. The spirit of cooperation that this engendered has encouraged universities to work together to provide external evaluations of the work of students and academics. For example, international examiners are often involved in external evaluations of honours degrees and higher degrees by research and universities undertake peer reviews as part of the competitive grants process. Universities also participate in national and international networks on issues to do with quality assurance such as benchmarking.

However, despite such quality assurance mechanisms and the desire of Australian universities to meet international standards, acceptance of their processes and their achievements has not always been unquestioned. In 1957 the Murray Committee (Murray 1958)[103] raised issues of staff/student ratios and graduation rates. In 1963, the Australian Vice-Chancellors' Committee conducted a survey of teaching practice in universities, followed five years later by a study of students, their admission, selection and progress (AVCC 1963, 1968). In 1965, the Committee on the Future of Tertiary Education in Australia (Martin 1965) recommended that universities make every effort to improve teaching methods. In 1979, the report on *Education, Training and Employment* (Williams 1979) recommended the establishment of a national qualification for university teachers, the completion of which would be a condition of service for new academics. Institutions did not, however, immediately respond to these promptings and in 1986 Bourke found that ... *with the exception of certain areas, Australian universities have yet to perfect within their own walls that culture of evaluation and self-assessment, especially at the department level, which is an integral part of any professional activity* (Bourke 1986, para 6.15).

Bourke was not implying that Australian universities were not concerned with standards but, rather, that they had not adopted systematic and routine procedures for assessing and evaluating performance in teaching and research, and could not monitor these activities over time or compare their performance either nationally or internationally.

From the late 1970s the Commonwealth Government promoted a climate of critical self-assessment within the higher education sector and universities were encouraged to monitor their own performance. A number of Australian universities participated in a study undertaken by the Organisation for Economic Co-operation and Development's International Management in Higher Education Program on performance indicators (Department of Employment, Education and Training 1993).

Throughout the 1980s this focus on performance was extended to include the improvement of efficiency and effectiveness and an increased awareness of public accountability. A number of universities participated in studies funded by the Commonwealth Tertiary Education Commission in the early 1980s on the development of measures of educational quality and efficiency (Linke 1984, Bourke 1986). From the mid-1980s greater emphasis was placed on system-wide studies. Major discipline reviews were funded through the Evaluations and Investigations Programme to determine standards and to improve quality and efficiency. While

[103] Sir Keith Murray chaired the committee on Australian Universities that presented its report in 1957. He was the Chairman of the University Grants Committee in the United Kingdom.

these reviews served to highlight the importance of quality assurance within institutions and across the sector, there was no mechanism to ensure that the recommendations of the reviews were acted on at the institutional level.

In 1985 the Australian Vice-Chancellors' Committee established a sub-committee to examine academic standards and in 1987 the Academic Standards Program was set up to provide coordinated advice to departments on standards in honours degrees in selected disciplines. These included physics, history, psychology, computer science, economics, biochemistry and English. The Australian Vice-Chancellors' Committee also published a *Code of Practice for Maintaining and Monitoring Academic Quality and Standards* in 1987 that was revised in 1990.

In 1986 by the Committee to Review Efficiency and Effectiveness in Higher Education (Hudson 1986) concluded that:

> *a professional approach to the work of an academic requires that higher education institutions develop procedures for systematic evaluation of their activities which will enable them to demonstrate that they are seeking at all times to preserve and enhance the quality of their activities*
> (para 8.72)

The committee noted that

> *procedures for self-evaluation which are established voluntarily, and assume a professional approach to their task on the part of academics, will be more effective in maintaining and improving the standards of academic activity than those which are the result of external pressure*
> (para 8.74)

and recommended that performance should not be linked to funding.

Universities implemented many of the recommendations of this committee.
Some of the steps taken to improve quality assurance in the late 1980s included:

- adoption of policies by many universities for regular reviews of academic departments, schools and faculties;
- initiation of a program of major discipline assessments with the purpose of assessing the aims and objectives as well as the quality of teaching and research in the particular discipline;
- examination of their own networks and performance and implementation of changes as a consequence of that appraisal; and
- development of staff assessment schemes by many universities to provide for regular review of performance of individual staff members.

Before 1988 there were 19 universities established by legislation and deemed to be autonomous. In addition, colleges of advanced education also provided higher education courses. As part of the Dawkins reforms set out in *Higher Education – a policy statement,* (Dawkins 1988), this binary system was abolished. The subsequent amalgamation of some colleges of advanced education with universities, and the conversion of some colleges into universities resulted in the Unified National System of higher education consisting of 36 universities. This dramatic change focused attention on the accreditation processes involved in establishing universities. The Australian Vice-Chancellors' Committee prepared guidelines on criteria for recognising institutions as universities after it received applications for membership from several newly created universities. Prospective members of the committee were required to demonstrate their capacity to meet these criteria which contained both qualitative and

quantitative measures. How to measure and ensure the quality of universities was to become a major issue throughout the 1990s.

In 1988 the Commonwealth Government also established the National Board of Employment, Education and Training. The Higher Education Council was one of its four advisory councils. The Council's task was to provide advice on the general development of higher education in Australia; the establishment of priorities for meeting the needs of universities; the funding, planning and implementation of programs; the granting of financial assistance to higher education institutions and the marketing of Australian higher education programs overseas (Dawkins 1988, p.74).

6.2 Changes in the 1990s

The 1991 Ministerial Policy Statement, *Higher Education: Quality and Diversity in the 1990s,* (Baldwin 1991) announced a comprehensive set of measures to enhance the quality of teaching and research and sought to address the weaknesses in the discipline review approach to quality assurance. A major initiative was the provision of funding, additional to institutional operating grants, to those universities able to demonstrate a high level of quality assurance in the context of their missions and goals. These funds were intended:

> *to act as a catalyst for institutions to allocate their total resources in ways which will maximise the quality of provision. The funds will be allocated in recognition of good performance in the use of all available resources to attain the best quality, including the achievement of equity objectives, taking account of such factors as quality management practices, the composition of the student population and the extent of progress in implementing articulation and credit transfer arrangements*.
> (para 4.22).

The Statement acknowledged that the higher education sector needed to be capable of continuous adaptation if it were to cope with the changing demands being placed upon it. At the time, these demands arose from the increasing diversity of the student population; the rising economic requirement for a skilled workforce; the on-going need for critical inquiry and cultural regeneration and the increasing internationalisation of higher education through the interchange of scholarships, staff and students (Baldwin 1991).

These changes raised concerns in some quarters that quality had been sacrificed to numbers as a result of the rapid growth in enrolments and the structural reorganisation of the higher education system. Most of the concerns related to the adequacy of inputs to match the scale of growth and the consequential effects on student-staff ratios and access to library materials and equipment. Some concerns related to the perceived decline in the quality of student intakes, others to the quality of course content and teaching procedures and some to the quality of graduates. There were concerns about allocation of resources for research with some views that funds should be directed to the best researchers, teams and universities.

At the same time, there was a growing belief that the higher education system should provide value for money not only to the Commonwealth Government, as the largest provider of funds and accountable for the use of public resources, but also to local students paying for their education through the Higher Education Contribution Scheme, to overseas students paying fees and to industry which was becoming more involved in higher education. There was a growing awareness of consumers and their right to be informed and assured about the quality of provision and the need for universities to satisfy a range of stakeholders. With this emphasis on students as consumers there was a growing focus on the quality of university teaching. Over the

decade there was increasing acknowledgment that good teaching was of the utmost importance for successful graduate outcomes.

The Committee for Quality Assurance in Higher Education

Following the 1991 policy statement, the Government gave a reference to the Higher Education Council, an independent statutory body, to advise on strategies to encourage, maintain and improve the quality of higher education. In 1992, the council produced *The Quality of Higher Education: Discussion Papers* as part of a consultation process with students, academic staff and university managers. Stakeholders were generally supportive of the position taken by the council although there were a few cautions about autonomy and diversity especially by the Australian Vice-Chancellors' Committee (Vidovich and Porter 1997).

Based on the recommendations of the Council published in its report *Higher Education: Achieving Quality* (Higher Education Council 1992) the Government established the Committee for Quality Assurance in Higher Education chaired by Professor Brian Wilson, then Vice-Chancellor of the University of Queensland and formerly President of the Australian Vice-Chancellors' Committee. The role of the Committee was to provide advice on quality assurance issues, to conduct independent audits of institutional quality assurance policies and procedures and to make recommendations to the Government on the allocation of annual quality-related funds. The work of this committee was pivotal in the development of a system-wide quality assurance framework in Australia.

The Committee conducted three rounds of quality reviews between 1993-1995 to examine teaching and learning, research and community service. Participation was voluntary although, not surprisingly given the promise of additional funding ($198 million over three years), all universities participated. For each of the three years of the Quality Assurance Program, the committee issued guidelines to universities, produced reports on each individual university as well as a general report on higher education as a whole, and commented on its own processes and recommendations for the allocation of funds. Originally the results of the review process and associated differential rewards were presented in a six-band ranking which was perceived negatively by some as a 'league table' of universities. This was modified into a matrix format later.

The basis of evaluation was an initial self-audit by universities. The evaluation was of the university as a whole rather than by individual disciplines and related to both quality assurance processes within the institution and the quality of its outcomes. Initially, there was some criticism from academics who saw the review process as flawed because the criteria for assessment of performance had not been made explicit and because after the first round of reviews, the larger, more established universities were generally ranked above smaller, newer institutions. There were concerns that lower rankings would not only damage morale but 'mislead consumers', especially potential overseas students. There were also concerns that the use of a set of performance indicators applied uniformly across the system would be likely to encourage uniformity of practice rather than foster diversity.

Although the reviews were quite controversial, they triggered considerable change in institutional systems as procedural gaps were identified and outcomes measured. Rather than providing a snapshot of current activities as the discipline reviews had, this holistic approach had the advantage of involving much of a university in a self-analysis and evaluation of policy. Vidovich and Porter (1999) identified other positive outcomes from the reviews including a culture change in some universities towards an acceptance of the notion of continuous improvement, or a least continuous self-evaluation, even though for some, this culture change may have been too rapid; and a renewed emphasis on the quality of teaching in universities. Earlier, Vidovich and Porter (1997) reflected that "the operation of the three-year cycle of the

quality reviews between 1993 and 1995 provides an example 'par excellence' of a government strategy of 'steering at a distance.' "

However, despite the fact that the Quality Assurance Program was successful in helping to build new quality assurance processes and to produce a change of culture within universities, there was little interest in extending the three-year program after 1995. It was seen as expensive with high administrative costs, and relatively demanding for the sector. Neither was the Australian Vice Chancellors' Committee interested in taking on the role formerly undertaken by the Committee for Quality Assurance in Higher Education.

Higher Education Council

In its report, *the Promotion of Quality and Innovation in Higher Education* (Higher Education Council 1995) the Council reported that there was a shared view amongst universities that there was a need for change so that quality assurance would have a less direct relationship to funding and more emphasis would be placed on institutional outcomes. It reported that there was a strong view that greater account needed to be taken of the diversity within the system and recognition be accorded to the strengths and needs of the newer universities.

In 1996, the newly elected Government announced in the *Higher Education Budget Statement August 1996*, that institutional quality improvement would in future be integrated into the educational profiles process. The Government's long-term objectives were to maintain and enhance quality in the higher education system and to demonstrate to the wider community, including the international community, that Australian universities were of a high standard. The new approach was based on the premise that this could best be achieved if universities were able to operate in a framework of government encouragement without unnecessary intervention.

The Commonwealth, therefore, asked the Higher Education Council in January 1997 to develop a structure which included, among other things: the integration of quality improvement in the yearly negotiations between the Commonwealth and universities (educational profiles process); reviews on particular aspects of higher education from time to time; general guidance to universities; and public reporting on progress made in quality improvement in the sector.

The Council provided an interim response in *Achieving Quality Outcomes in Higher Education* in April 1997 that recommended an approach to quality 'and set out guidelines for institutions for 1997'. This was followed, its final report in January 1998, by a discussion of basic principles and processes with a strong emphasis on performance indicators. The Council recommended that there be three yearly reviews of institutional quality in the form of desk audits of material provided by universities for the educational profiles process; that it work with the Australian Vice Chancellors' Committee and the Department of Employment, Education, Training and Youth Affairs to develop sector-wide performance indicators; and provide advice from time to time on thematic reviews. This approach was discontinued after one year when responsibility for quality assurance transferred to the Department of Education, Training and Youth Affairs[104].

Performance Indicators

The 1988 policy on higher education (Dawkins 1988, p. 85) supported the development of a funding system that could respond to institutional performance and the achievement of mutually

[104] Although the Higher Education Council was officially disbanded when *the Employment, Education and Training Amendment Act 2000* abolished the National Board of Employment, Education and Training, the Council effectively ceased to carry out its quality assurance role after the end of the term of the last chair of the council, Professor Gordon Stanley on 31 January 1998.

agreed goals and which would take into account a range of output, quality and performance measures. A partial range of performance indicators had been compiled in the context of the discipline review of engineering and had revealed wide variation in levels of performance between comparable institutions and departments.

In 1989 the Commonwealth appointed a research group, chaired by Professor Russell Linke to undertake a comprehensive examination of performance indicators in higher education. This study suggested that indicators were of most use as part of a university's self-assessment process rather than in direct application to funding at the national level (Baldwin 1991, p.31). This point was taken up in the 1991 policy statement on higher education in which the Minister for Higher Education, the Hon Peter Baldwin, MP, stated that the Government had no intention of prescribing performance indicators to be used by universities. However, the Commonwealth was interested in assisting universities to develop quantitative and qualitative indicators of performance as well as supporting institutions' efforts to maintain and enhance the quality of course design, teaching, assessment and staff development (Baldwin 1991, p. 32).

Table 6.1 Indicators of Characteristics and Performance of Higher Education Institutions

Students	**Staff**
Equivalent full-time student units (EFTSU)	Academic and non-academic staff full-time equivalent (FTE)
Type of enrolment	Higher level non-academic staff/all staff ratio (FTE)
Postgraduate students	Academic staff by current duties term (FTE)
Overseas students	All staff by function (FTE)
Domestic HECS liable and fee-paying students	Academic staff by classification (FTE)
Basis for admission to current course	Academic staff by classification and gender (FTE)
Median age	Academic staff by age (FTE)
Equity groups	Academic staff by qualifications
Undergraduate courses by broad field of study	Student-staff ratio by academic organisational unit group
Postgraduate courses by broad field of study	Remuneration per employee

Finance	**Outcomes**
Operating revenues	Retention rate
Research income	Student progress rate
Research income by field of study	Graduate full-time employment
Operating expenses	Graduate full-time study
Salaries and salary related costs	Graduate starting salaries
Expenses per EFTSU	Course Experience Questionnaire (CEQ) - overall satisfaction
Assets	Course Experience Questionnaire (CEQ) - good teaching
	Course Experience Questionnaire (CEQ) - generic skills

The Commonwealth collected data from universities using a range of indicators[105] (Table 6.1). Information covering student characteristics, staff, research, finances, as well as some outcome measures such as retention rates and graduate outcome data derived from its statistical

[105] Department of Education, Training and Youth Affairs 1998, *The Characteristics and Performance of Higher Education Institutions,* Occasional Paper series 98-A, Higher Education Division, DETYA. An updated version (2001) can be found at http://www.detya.gov.au/archive/highered/statistics/characteristics/contents.htm

collections, were published in *The Characteristics and Performance of Higher Education Institutions*. In addition, the Commonwealth's *Which Course? Which University?* Website, established in 2000, provides information about the employment and study outcomes of past graduates.

Box 6.1 Assessing the quality of outcomes

Graduate Destination Survey
The Graduate Destination Survey has been conducted since the 1970s by the Graduate Careers Council of Australia and is currently funded by the Commonwealth. Graduates complete the survey four months after completion of their courses. It provides information on the proportion of graduates in full time employment (including industry, occupation and salary level) and full time study (including level and field) from each institution. The survey provides valuable comparative information to the public, and benchmarking information to universities themselves to help them assess the success of their graduates in the competitive labour market.

Course Experience Questionnaire
The annual undergraduate Course Experience Questionnaire is a student survey disseminated by the Graduate Careers Council. It covers teaching, goals and standards, workload, assessment, generic skills and overall satisfaction and is being developed to measure broader aspects of student experience in the areas of student support, learning resources, learning community, graduate qualities and intellectual motivation.

Postgraduate Research Experience Questionnaire
The Postgraduate Research Experience Questionnaire was developed by the Australian Council for Educational Research in conjunction with the Graduate Careers Council. The questionnaire was administered nationally for the first time in 1999. It measures research graduates' satisfaction with supervision, skills development, intellectual climate, infrastructure, thesis examination and goals.

Graduate Skills Assessment
The Graduate Skills Assessment was developed by the Australian Council For Educational Research and tests generic skills in the four dimensions of written communication, problem solving, critical thinking and interpersonal understanding. The first test for graduating students was administered in October/November of 2000 and the first test for commencing students was run in February/March 2001.

The test results are intended to be used:

- to assist graduates to obtain employment;
- to assist employers with the selection of graduates;
- to enable students to verify their academic claims for acceptance into further study; and
- to measure 'value-adding' by universities.

Quality assurance plans and performance measures

From 1998 onwards, all publicly funded Australian universities were required to provide Quality Assurance and Improvement Plans instead of reviews. The plans were expected to include goals and strategies to maintain and improve quality assurance in the key areas of teaching and learning, research, management and community service and include data on outcomes. Universities were required to specify their graduate attributes in the plans as well as to report on

certain mandated performance indicators and the results of the Graduate Destination Survey and Course Experience Questionnaire.

The Commonwealth also funded the development of performance management tools to assist with quality assurance and improvement. These included a benchmarking manual for universities to use to assess themselves against like institutions and the development of the Postgraduate Research Experience Questionnaire, the Graduate Skills Assessment, and an expanded version of the Course Experience Questionnaire (Box 6.1).

Benchmarking

> *While the evolution of imperial and metric systems of measuring gradually standardised benchmarks in many spheres, in universities clear definitions of what is worth measuring and standard measures of achievement of desired outcomes have proved particularly problematic*.
> (McKinnon et al., p.7 2000)

McKinnon, in developing the benchmarking manual, was faced with the challenging task of developing a set of benchmarks for Australian universities that would provide senior staff with the tools they needed to determine performance trends in the university and to initiate continuous self-improvement. The benchmarks also needed to be sufficiently well developed for use by groups of universities who wanted to compare performance on all or some of the aspects covered by the benchmarks. More controversially, the benchmarks needed to provide scope for universities to assess their competitive position relative to other universities.

There were a number of questions that needed to be resolved in order to develop the benchmarks. For example: to what extent should benchmarks be criterion-referenced or norm-referenced? Should the focus be on outcomes rather than the traditional concentration on processes? Can 'best practice' actually be identified or is 'good practice' a more realistic objective? How can benchmarks meet the challenge of measuring functional effectiveness rather than simply things that can be counted? How do benchmarks take into account the great diversity in size, age, location and other features of universities in Australia? How do they distinguish between the performance of different campuses, faculties etc? There were also issues to do with the quality of data used to make comparisons, the need to recalibrate benchmarks from time to time and how to validate them.

Box 6.2 Benchmarking

From McKinnon et al. (2000) p.141

Benchmark 11.2 Area: Staff; Element: Management of workforce; Type: Leading

Sources of data: Individual university staff profiles
Benchmark rationale: Universities fundamentally rely on capable staff (teaching, research and general) for their achievements. It is essential to manage the staff profile, to respond effectively to changing institutional priorities and changes in the skills base required. Universities need to continuously update their desired staff profiles (their expectations for the age mix, gender, cultural diversity, qualifications, experience, recruitment, retention, turnover, retirement strategies, classification levels and balance of academic and general staff).

Good practice
Good practice requires matching the staff profile and skills base to the goals of units, and, on an integrated basis, the university's current and future mission, in terms of age, gender, experience, rank, research aspirations etc. The test of this benchmark is the existence of

explicit management strategies, appropriate staff information systems, and successful realisation of strategies adopted.

Good practice requires that there are documented targets and programs (including policies on recruitment, retention, tenure and promotion), regular review and management actions to achieve the university's goals. It may not be possible to achieve exact ratios because staff are hired for long periods and may depart unexpectedly, but a university should be within a few percentage points of the targets it has set for itself. The wider the under-achievement or the over-representation of particular categories of staff, the lower the overall achievements of the university.

Levels

1	**3**	**5**
Lack polices or requirements for compliance to reach profile goals. Only reaching to plus or minus 40% of goals.	Some appropriate policies to manage towards a profile, but a soft approach to management allowing non-compliance by units. Only reaching to plus or minus 25% of goals.	Appropriate policies and fully developed profile goals. Achievement of staff profile in all respects within plus or minus 5%.
Self assessment ……	Check assessment ……	

These questions were worked through in a process that involved 33 universities, six working parties, a number of workshops and discussions and the involvement of a large number of experts in all aspects of university life. The result was a well-tested benchmarking manual for Australian and other universities in a user-friendly format. *Benchmarking: A manual for Australian universities* (McKinnon et al. 2000), contains 67 benchmarks covering a wide spectrum of university activities from teaching and learning to research, finances, internal management and internationalisation. An example of one of the benchmarks is provided in Box 6.2.

Graduate Attributes

At the beginning of the 1990s it was recognised that the Australian higher education system had changed markedly in the previous fifty years. Because of the rate and extent of change, particularly as a result of the establishment of the unified system, there was renewed interest in the quality of the higher education system. To examine issues of quality required a clarification of what were appropriate outcomes of higher education. It was realised that the desired outcomes of a university education extended beyond simply gaining qualifications to encompass attributes that would be of value to graduates in their employment, in their wider social participation, and in their individual lives (Higher Education Council 1992a,b).

> *One important focus on the 'characteristics of quality' should therefore be on outcomes of the higher education system: research, involvement with the community and, critically, the aspirations we have of our graduates; a description of the attributes that graduates should acquire if exposed to a high quality higher education system – including all its processes. This does not imply that all the described attributes are quantifiable, and certainly does not mean that they must be related to immediate employment; but it does suggest that if the*

> *objectives are known and explicit, all the stakeholders – students, staff, employers, the community more generally – are in a better position to judge whether the processes are suitable – whether what the universities seek to do is achievable.*
> (Higher Education Council 1992, p.19)

In 1992 the Higher Education Council provided advice (Higher Education Council 1992b, p.20) on the type of characteristics that should be acquired by all graduates through their university experience regardless of their discipline or field of study. It saw these characteristics as a blending of: generic skills, attributes and values; the acquisition of a body of knowledge; and professional, technical or other job-related skills. The generic skills included qualities such as critical thinking, intellectual curiosity, problem-solving, logical and independent thought. Personal attributes included intellectual rigour, creativity and imagination and values included integrity, tolerance and ethical practice. The Council believed that these generic skills, attributes and values should represent the central achievements of higher education.

In the early 1990s most Australian universities began to identify the generic capabilities or skills that they believed their graduates should possess. There was some variation in the way universities scoped their graduate attributes, with some focusing on employment-related skills and placing little importance on social or cultural attributes, and others focusing on what might be described as the cognitive aspect of a skill at the expense of any application of that skill. Some universities clustered a number of attributes under a smaller number of broader headings. For example:

- Queensland University of Technology – knowledge/problem solving; ethical/ attitudinal; and social/recreational;
- University of Western Sydney – disciplinary skills; generic practical, analytic and knowledge skills; personal skills and attributes;
- Australian Catholic University – intellectual, professional, values.

Gradually attributes were refined as universities revisited their original efforts and attempted to build into their public statements evidence of the extent to which the curriculum actually addressed the attributes nominated. In many universities, an early (and in some instances continuing) stage was to devise and conduct a graduate or generic skills survey to attempt to measure student (and sometimes staff and employer) perceptions of the development of generic skills in the students' learning experience. This was done at an institutional level, for example, the University of Western Australia Careers Advisory Board survey of the development of generic skills in 1995 and Curtin University of Technology's Graduate Attributes Survey (administered annually since 1996); or at a course, programme or subject level.

In 1998, the Commonwealth required all Australian universities to specify their graduate attributes in their Quality Assurance and Improvement Plans. Since that time all Australian universities have embraced the specification of graduate attributes. However, the comprehensive integration of those attributes into the curriculum so as to ensure specific graduate outcomes, has been adopted with varied enthusiasm and commitment. Embedding graduate attributes in the curriculum inevitably involves an audit or mapping of the curriculum to determine where graduate attributes are being currently addressed or developed within a particular course. The audit process requires academics to look beyond the stated objectives of a course, because whilst a course may have the stated objective of fostering, for example team-work, this attribute may not be manifest in any of the teaching or learning processes in the course. Integral to this is an examination of what attributes/skills are assessed in the course as it is not possible to recognise such attributes as outcomes of a course unless they are assessed either formatively or summatively.

A number of universities made a concerted commitment to the development and integration of graduate attributes into their education programs as illustrated by the following examples.

In the late 1990s the Commonwealth funded a two-year study by the Australian Technology Network universities (RMIT University, Queensland University of Technology, University of Technology Sydney, the University of South Australia and Curtin University of Technology) which documented the development and implementation of programmes built on graduate attributes in these universities. In 1998, these five universities also collaborated in a joint research project with the recruitment company Morgan and Banks, to investigate graduate attributes, with a particular focus on incorporating employer concerns and have made considerable progress in integrating graduate attributes into the curriculum (University of South Australia 2002a).

Box 6.3 Graduate Attributes

Since 1998, in their Quality Assurance and Improvement Plans, universities have identified the generic capabilities or attributes that were desirable for all graduates to possess at the end of their university learning experience, irrespective of the field of study of the degree they had been awarded. As would be expected in a diverse higher education system where institutions have distinctive missions and goals, universities vary in the way they define these attributes[106]. Nevertheless, there is a core of attributes that most universities wished their graduates to possess. In addition to this core set, individual universities value a wide range of additional attributes that reflected the distinctive education they are endeavouring to provide.

Common attributes required of graduates

Knowledge skills	**Thinking skills**
Graduates should: • have an appropriate level of literacy and numeracy skills • be able to identify, access, organise and communicate knowledge in both written and oral English • have good listening skills • have an international awareness • have the ability to use appropriate technology to further the above	Graduates should: • be willing to challenge current knowledge and thinking • have conceptual skills • have problem solving skills • be creative and imaginative thinkers • be able to combine theory and practice • be able to reflect on and evaluate their own performance
Practical skills	**Personal skills and attributes**
Graduates should: • be able to use information technology • be able to apply technical skills appropriate to their discipline • be able to initiate and participate in organisational and social change	Graduates should: • have a commitment to lifelong learning • be able to function in a team • be adaptable and flexible • have leadership skills • be independent learners • be self-reliant, practical and enterprising

[106] The Following web page provides links to university websites describing their graduate attributes: http://www.unisanet.unisa.edu.au/gradquals/whatr/austral.htm

- understand the concepts of ethical action and social responsibility

Additional attributes expected of graduates

- love of learning
- sense of self
- ability to adapt knowledge to new situations
- social and environmental responsibility
- understanding of indigenous issues and history as they relate to specific disciplines
- completion of part of education in industry, the community or overseas
- seek imaginative approach to problems and attempt to set the agenda rather than follow a well trodden path
- be agents of positive change
- an awareness of sustainability and its social benefit
- profound respect for truth and intellectual integrity, and for the ethics of scholarship
- openness to new ideas and unconventional critiques of received wisdom
- international awareness and openness to the world based on understanding and appreciation of social and cultural diversity and respect for individual human rights and dignity
- ability to plan and achieve goals in both the personal and the professional sphere
- tolerance and integrity
- acknowledge personal responsibility for value judgments and ethical behaviour towards others

Source: Department of Education, Training and Youth Affairs 1999, The Quality of Australian Higher Education.

The successful integration of graduate attributes at an institutional level can be seen in the approach taken by the University of Newcastle. It adopted as a broad University goal to 'develop graduates whose knowledge, skills, abilities and attitudes are highly valued, and allow them to contribute to the workplace and broader community' (Department of Education, Training and Youth Affairs 2001, p. 301). It then adopted a strategy and a key performance indicator for this goal. The indicator being the 'number of courses with features which incorporate core skills, abilities and attitudes valued in the workplace and broader community'. Since 1998, through the establishment of its Core Skills and Graduate Outcomes Project Group, the University of Newcastle has embarked on a programme to foster the integration of core skills into the curriculum.

The University of Wollongong couched its approach to graduate attributes in terms of tertiary literacies and initiated a number of projects to develop the full range of these literacies in relation to specified responsibilities. The University of Canberra reviewed its academic programme paying particular attention to the need to ensure the development of generic skills. As a result, the University actively encouraged students to undertake double degrees that combine generalist and specialist courses, so that professional capabilities are complemented by a structured generalist education.

By the turn of the century most Australian universities had started to embed their graduate attributes into the curriculum and were developing strategies and systems for assessing and recording outcomes. For example, the University of South Australia has worked since 1995 to develop a university-wide strategy for curriculum integration and assessment focused on seven specific qualities. The University has developed 'generic indicators' to illustrate in general terms the achievement of each of the seven qualities. Each program adapts or 'elaborates on' the generic indicators to fit each field of study. These elaborated indicators help shape the teaching, learning and assessment that make up a program at the University (University of South Australia, 2002b).

Increasingly in Australia, universities are using achievements in relation to graduate attributes as indicators of the quality of teaching and learning outcomes. This positioning of graduate attributes reflects an international shift in the quality movement, as the focus moves from inputs and process, towards educational outputs and outcomes.

Quality of Teaching

One of the positive elements that emerged from the focus on quality assurance in the 1990s was the recognition of the importance of the quality of teaching. More and more, good teaching was seen as essential in order to produce graduates of high calibre with the attributes desired by universities, professional bodies and employers. As a result, greater importance was attached to university teaching and this could be seen in both the practices of universities and government funding. Senior posts responsible for teaching quality were created in universities. A teaching criterion was incorporated into the promotion criteria of many universities and there was a use of a wide range of teacher assessment procedures including student appraisal.

The Commonwealth encouraged innovation in teaching through project funding under the Higher Education Innovation Programme. Under this program, the Committee for the Advancement of University Teaching was established in 1992 to promote the development of good teaching practice and the Commonwealth Staff Development Fund was established to support staff development activities. The Committee for the Advancement of University Teaching managed competitive grants programs, organised workshops and commissioned projects with national implications. It established a national network of clearing houses to operate as specialist coordinating and referral centres for teaching and learning initiatives. The committees were replaced in 1996 by the Committee for University Teaching and Staff Development.

In 1998 the West Committee recommended that the Committee for University Teaching and Staff Development play a role in encouraging

> *institutions generally to appoint new academic staff on probation until they have completed a qualification in teacher training*
> (West 1998, p.38)

The West Report noted that the

> *attitude that exists within academe that one doesn't train to teach will not be possible in the future. If academics are to enjoy the freedom to develop their own courses and control their examination and assessment methods, they must be properly qualified to do so.*
> (West 1998, p. 57)

Most Australian universities responded to the identified need for some form of preparation for tertiary teachers by establishing formal courses. These courses or programs were based on a range of philosophical and pedagogical perspectives and were of varied duration, content, mode of delivery and timing. Some universities made such courses mandatory for new academic staff and some encouraged staff to participate with financial inducements. Some universities created courses leading to formal qualifications such as a graduate certificate or diploma and some offered short induction programs with a component focusing on tertiary teaching. Many universities also offered awards for teaching.

In 2000 the Australian Universities Teaching Committee replaced the Committee for University Teaching and Staff Development. This new committee was established with a brief to identify emerging issues in teaching and learning; identify methods for enhancing learning; and promote

national and international collaboration on the quality of teaching. The Commonwealth also raised the profile of university teaching through the creation of the prestigious Australian Awards for University Teaching managed by the Committee.

Quality assurance in research and research training

The dramatic changes in the higher education research environment in the 1980s led to greater pressure for the evaluation of the quality and efficiency of research conducted by universities (Department of Employment Education and Training 1993). The Smith Committee (Smith 1989) suggested that the performance of institutions should become an integral part of any higher education funding program with research performance based on a set of input and output indicators. In its paper, *Research for Australia* (Dawkins 1989), the Commonwealth Government suggested that in the future, research performance would be taken into account when determining operating grants for universities. In 1991, the Department of Employment, Education and Training established a program of research evaluation in order to assess the efficiency and effectiveness of research and research training schemes.

Research and research training conducted during the 1990s was characterised by a high level of competitiveness, and increasing size and complexity even in universities with relatively small research profiles. It required universities to manage increasingly complex processes and issues involving grant applications, intellectual property, commercialisation, support for research groups, contractual arrangements and collecting and analysing data. It also increasingly involved monitoring and evaluating performance as there was a growing emphasis on ensuring quality outcomes. The greater emphasis on quality assurance was fuelled by persistent concerns, identified by students, institutions and employers, about the poor quality of some students' research training environment; mismatches between the research priorities of institutions and the interests of students; and high attrition and slow completion rates of students. As well as concerns about research training there were also some perceptions that universities had inadequate management practices with respect to undertaking research; that they were insufficiently focused on commercialisation of research as a valuable outcome; and were not effective in exploiting the intellectual property generated from research.

The Commonwealth's *Knowledge and Innovation: A policy statement on research and research training* released in 1999 sought to address these issues. It introduced performance based funding for research training places that would take account of a university's success in attracting research income, in achieving research degree completions and in publications output. It limited Commonwealth funding to support research students to the equivalent of four years full-time for a PhD student, and two years for a Masters student in order to encourage universities to improve their internal arrangements for selecting students, structuring research programmes and providing supervision and support.

The policy also encouraged universities to diversify their funding sources and enhance their links with industry and government. Industry-sourced income was valued as highly as income from competitive grants for the first time. This recognised that industry and other 'purchasers' of research had strong incentives to invest in research in a discriminating manner and that direct peer review was not the only process that could discern high quality research.

Research and Research Training Management Reports were introduced as an important accountability mechanism and to provide information on universities' research strengths and their performance in areas such as their ability to attract research income, their research active staff and the quality of the research training experience[107]. From 2002 these reports, in which universities were required to identify their strategic objectives and future directions for research

[107] Readers are referred to chapter three for further details on research and research training

and research training, had to be approved by the Commonwealth in order for universities to receive block grant funding for research and research training.

International developments

In the 1990s quality assurance and enhancement in higher education became a major international focus. In 1993, 45 countries were represented at the first conference of the International Network of Quality Assurance Agencies in Higher Education. According to Vidovich and Porter (1997), the two key factors given for the rise to prominence of the quality movement were the rapid expansion from elite to mass higher education systems and a concurrent need for economic constraint to limit public expenditure. In other words, doing more with less by improving effectiveness.

International organisations such as the Organisation for Economic Co-operation and Development called for new structures and new approaches to quality assurance. In the United States, the United Kingdom, and New Zealand, quality assurance was a major focus. There were a number of multilateral initiatives to deal with issues linked to educational quality such as the recognition of qualifications and student and labour market mobility. In Australia a range of benchmarking initiatives was implemented with the goal of enabling universities to be assessed against various quality indicators, by country, by region and even globally (Department of Education Training and Youth Affairs 1999). In the United Kingdom, the Dearing Committee (1997) recommended that academic staff undergo teacher training.

By the end of the decade, there was pressure on Australia to develop a more comprehensive approach to quality assurance to protect the reputation of Australian universities; to enable them to maintain and develop Australia's very successful education export industry[108] and to ensure satisfied 'customers' at home. The quality assurance initiatives in the United Kingdom also gave added impetus to this move.

6.3 Development of a national system of quality assurance

During the 1990s, the involvement of Australian universities in the provision of tuition to overseas students increased dramatically. The number of overseas students studying at universities within Australia increased from 24,998 in 1990 to 95,607 in 2000.

The sustainability and growth of the export of Australian higher education depended on the perceived as well as the actual quality of education that overseas students received from Australian universities and the value of the qualifications awarded to them. This is demonstrated by the fact that the majority of Asian students choose the United Kingdom and the United States of America before Australia as the most desirable places to attend university. One of the reasons given for this preference is the perception that university standards in these countries were higher than those in Australia (The Asian Student 2000). The need for a more formal approach was made more pressing with the advent of a range of new players who did not share the traditions of Australia's public universities. The most notable was Greenwich University established on Norfolk Island (an Australian External Territory).

[108] Readers are referred to chapter five for more details of internationalisation

Box 6.4 Maintaining quality at overseas campuses

David Robinson, former Vice-Chancellor and President Monash University
Tony Pollock, Executive Director, Office of International Affairs
Whenever Monash University is considering the establishment of a campus overseas, the operating environment in the host country is reviewed against a number of factors such as:

- government attitudes and values regarding higher education;
- legal provisions for higher education institutions;
- economic and political stability;
- safety and security;
- student demand and capacity to pay;
- availability of appropriate staff;
- transport and communication infrastructure; and
- demographic profile.

In addition, the University has developed a Global Development Framework which sets out a number of guiding principles to ensure that the University never loses sight of its core academic purpose or compromises its reputation, such as:

- all activities should reflect and advance the University's priorities, objectives and principles as set out in Leading the Way: Monash 2020;
- under the Monash University Act (1958) responsibility for granting awards and for the quality and calibre of Monash programs rests solely with the University, and all activities must be established and operated in accordance with relevant university policies and procedures;
- any international activity should be in the overall interests of Monash as a whole. Nothing should be done which benefits one part of the University to the detriment of the University's overall interests, including its likely future interests;
- any international activity should add identifiable value to the University, for example by extending learning, teaching and research; increasing opportunities for students and staff; or enhancing the university's overall standing;
- the best staff available should be recruited to support Monash endeavours wherever they may be;
- full account must be taken all of the resources required for Monash to meet its obligations under any agreement or in support of any international activity. Appropriate business planning should be undertaken before any final decision is taken;
- any international activity must accord with the spirit and letter of appropriate legislation in relevant host countries; and
- all such activities should be reviewed and monitored regularly to ensure they continue to contribute effectively to the development of Monash as set out in Leading the Way: Monash 2020.

The framework acts as a mechanism to help ensure the quality of the work of Monash University overseas.

In April 1999 the Ministerial Council on Education, Employment, Training and Youth Affairs, galvanised by the application (which was ultimately unsuccessful) of Norfolk Island to have Greenwich University listed on the Australian Qualifications Framework[109] register, referred the

[109] The Australian Qualifications Framework was established by the Ministerial Council in 1995. It maintains the official registers of universities and non self-accrediting higher education providers in Australia. More information on the AQF, including its public registers, can be found on their website at http://www.aqf.edu.au/ .

issue of a common approach to higher education accreditation criteria and procedures to a committee of Commonwealth and State/Territory higher education officials (then called the Multilateral Joint Planning Committee, subsequently called the Joint Committee for Higher Education).

In mid 1999 the Commonwealth commissioned two studies to examine existing quality assurance arrangements in Australia and overseas. The studies (Anderson et al. 1999 and Harman and Meek 1999) canvassed a range of quality assurance models. One model closely examined for possible adoption in Australia was the national quality assurance system put in place in the United Kingdom in 1997. The British approach to quality assurance was centred on a quality assurance agency whose role was to review the performance of universities at a subject and institutional level. The subject review involved academic peers reviewing six aspects of provision: curriculum design; teaching; learning and assessment; learning support; learning resources; and quality management and enhancement. The institutional review focused on the overall management of quality and standards at an institution and resulted in a published report once in every six-year cycle. However, this approach to quality assurance was very labour intensive and expensive for both agencies and institutions especially as it was unlikely that a large number of programs would be identified as sub-standard given the emphasis that universities place on protecting their reputation.

The United Kingdom model was criticised by the academic community as being too prescriptive and bureaucratic and for the excessive costs involved in running the scheme and preparing universities for review. It was also seen as too complex and intrusive for Australia. Indeed, in 2001, the United Kingdom restructured its quality assurance system in recognition of the need to keep bureaucracy to a minimum and to reduce the burden on higher education institutions (*Quality assurance in higher education: delivering lightness of touch,* a joint paper of the Higher Education Funding Council of England, Universities UK, Standing Conference of Principals). It seemed obvious that approaches used by other countries could not simply be transposed to Australia.

At the same time as the Commonwealth's studies, the Australian Vice-Chancellors' Committee proposed a model for an Australian university quality assurance system based on a sector-owned auditing process. This had similar elements to quality assurance systems established in New Zealand and the Netherlands and quality audits undertaken by accreditation agencies in the United States of America. In the model the basis for ensuring university quality was a university's chosen internal quality system. A single, national body responsible for overseeing independent, external quality audits of universities' internal systems on a five-year cycle was proposed. The audit body would be a private not-for-profit company of which each university would be a member. Some auditors were to be selected from the sector and others from outside the sector. The proposed audit process involved an institutional statement against audit criteria, audit by appointed auditors, a first report allowing comment by the institution, and publication of a final report.

The Vice-Chancellors proposed that the external review should check whether a university's quality system was effective in assisting the university to achieve its stated aims and objectives, and should consider the university's track record of addressing previously identified weaknesses. It would not make its own conclusion on the quality of the university's academic or research outcomes. The proposed process was similar to that in place in New Zealand where a university's outcomes were considered as evidence of the effectiveness of the university in achieving its own aims and objectives but where the outcomes themselves were not assessed. The Commonwealth and States did not support the Vice-Chancellors' model because it did not provide the desired degree of detachment of the audit process from those being audited.
At the end of 1999 a national seminar was held to discuss future plans and arrangements for quality assurance and accreditation in Australian universities. It was sponsored by the Commonwealth Government, the Institutional Management in Higher Education Program of the

Organisation for Economic Co-operation and Development and the University of New England's Centre for Higher Education Management and Policy. The seminar occurred at a pivotal moment when the attention of varied stakeholders was focused on the issue of quality assurance in Australian higher education. At the seminar, several different quality assurance models were presented. Although significant differences existed in the institutional structure and overall control, all were based on the premise that more systematic, coherent and searching procedures of quality assurance were required. It was widely agreed that a new national agency would be a desirable component of a revised Australian quality assurance system (Skilbeck 2000).

The Multilateral Joint Planning Committee presented its advice to the Ministerial Council on Education, Employment, Training and Youth Affairs in March 2000 and made two recommendations: (1) that the ministers endorse a number of protocols directed at ensuring consistency of State accreditation processes for new higher education institutions and the higher education courses of other providers (the National Protocols for Higher Education Approval Processes), and (2) agree to the establishment of the Australian Universities Quality Agency. Ministers accepted both recommendations. The protocols and the Australian Universities Quality Agency added a national dimension to the accountability processes embedded in universities' legislation and the provision of information to the Commonwealth as part of the accountability for public funding.

National Protocols

Up until the end of the decade, the processes employed by States and Territory accreditation bodies varied. The five protocols[110] endorsed by the Ministerial Council in March 2000 ensured consistent criteria and standards across Australia for establishing new universities and accrediting the programs of higher education providers that are not self-accrediting. New universities are generally established under State and Territory legislation[111] that gives them the power to operate legally as autonomous self-accrediting bodies. This gives universities the ability to accredit their own programs and to determine their own academic standards.

Australian Universities Quality Agency

The Australian Universities Quality Agency was established as a not-for-profit company, with the Commonwealth, State and Territory Governments responsible for overhead costs and the bodies being audited responsible for the direct costs of audits.
The Agency is responsible for:

- conducting quality audits of self-accrediting institutions and State and Territory accreditation authorities on a five yearly basis;
- providing public reports revealing the outcomes of these audits;
- reporting on the criteria for the accreditation of new universities and non-university higher education awards, as a result of information obtained during the audits of institutions and State and Territory accreditation processes; and
- reporting on the relative standards and international standing of the Australian higher education system and its quality assurance processes, as a result of information obtained during the audit process.

The mode of operation of the Agency attempts to balance the need for a comprehensive assessment of a university's quality assurance processes with the need to keep bureaucratic

[110] National Protocols for Higher Education Approval Processes 2000, http://www.dest.gov.au/highered/mceetya_cop.htm

[111] Note that the Australian National University, the Australian Maritime College and the Australian Film, Television and Radio School were established under Commonwealth legislation.

requirements, costs and time involved in the process to a minimum. For this reason, audits of universities are based on a self-assessment by the university followed by a site visit by the audit panel. They are whole-of-institution audits that focus on the key areas of teaching and learning, research and management, and on the adequacy of a university's quality assurance arrangements. The audits assess a university's success in maintaining standards consistent with university education in Australia. The Agency takes advice from panels of experts with substantial senior academic and administrative experience in higher education together with quality assurance experience and recognises the diversity of the higher education sector.

Box 6.5 National Protocols for Higher Education Approval Processes

Protocol 1: Establishment and recognition of universities
State and Territory Governments have responsibility for approving applications from institutions wishing to operate as universities within their State or Territory. The common definition of an Australian university is an institution listed on the Australian Qualifications Framework 'which meets nationally agreed criteria and is established or recognised as a university under State, Territory or Commonwealth legislation'. The title 'university' is protected in business names/associations legislation, and under Commonwealth Corporations Law.

Protocol 2: Recognition of overseas higher education institutions seeking to operate in Australia
Any overseas higher education institution seeking to operate in Australia must satisfy criteria relating to accreditation in the country of origin and comparability to Australian requirements. These criteria delivery arrangements address the arrangements for academic oversight, and quality assurance and financial viability.

Protocol 3: Accreditation of higher education courses to be offered by non self-accrediting institutions
As non-university higher education providers are not able to accredit their own programs they must be registered and have their courses accredited through the Government higher education recognition and accreditation authorities in the State or Territory in which they operate.

Protocol 4: Delivery arrangements involving other organisations
Where a university or other self-accrediting institution enters into an arrangement with another organisation to deliver a course, and the university or other self-accrediting institution is to grant the academic award, the relationship will be construed as one of principal and agent. The principal (the university or other self-accrediting institution) in this relationship must carry full responsibility for all aspects of delivery. Institutions offering an award, regardless of whether they have used curricula and materials supplied by another institution, will be subject to the accreditation requirements of the State or Territory in which they operate.

Protocol 5: Endorsement of courses for overseas students
The endorsement of courses for overseas students is given by the State or Territory where the course is to be delivered and applies to courses delivered within Australia. Endorsement is only given where the endorsing authority has confidence that the courses concerned are offered at a standard equivalent to other programs of a similar kind; that facilities and services are of adequate standard; and that the organisation providing the program has the financial and other resources to ensure full and effective delivery of the program.
This Protocol is supported by a National Code of Practice for Registration Authorities and Providers of Education and Training to Overseas Students. The code seeks to provide a nationally consistent and legally enforceable framework for the registration of providers of education and training to overseas students on the Commonwealth Register of Institutions and Courses for Overseas Students.

Should a university receive a negative audit report, it is the responsibility of the governing body of the university concerned or in the case of State and Territory accreditation authorities, of the relevant department and minister to determine appropriate action. In the unlikely event of failure to respond appropriately to negative reports the Commonwealth may impose funding sanctions or the relevant State or Territory governments may take regulatory action.

Audits of the State and Territory higher education accreditation authorities will pay particular attention to their recognition and accreditation processes; the consistency of these processes with the National Protocols for Higher Education Approval Processes and the consistency of their judgments with those made in other States and Territories.

The Australian Universities Quality Agency operates independently of governments under the direction of a Board of Directors consisting of five persons elected by the higher education sector, six persons nominated by governments (three nominated by the Commonwealth including the chair, Professor David Beanland) and an Executive Director approved by the Board. The additional status or standing resulting from a successful audit by such an independent body is likely to assist universities in the highly competitive global education market while at the same time providing useful feedback to universities on the effectiveness of their quality assurance processes.

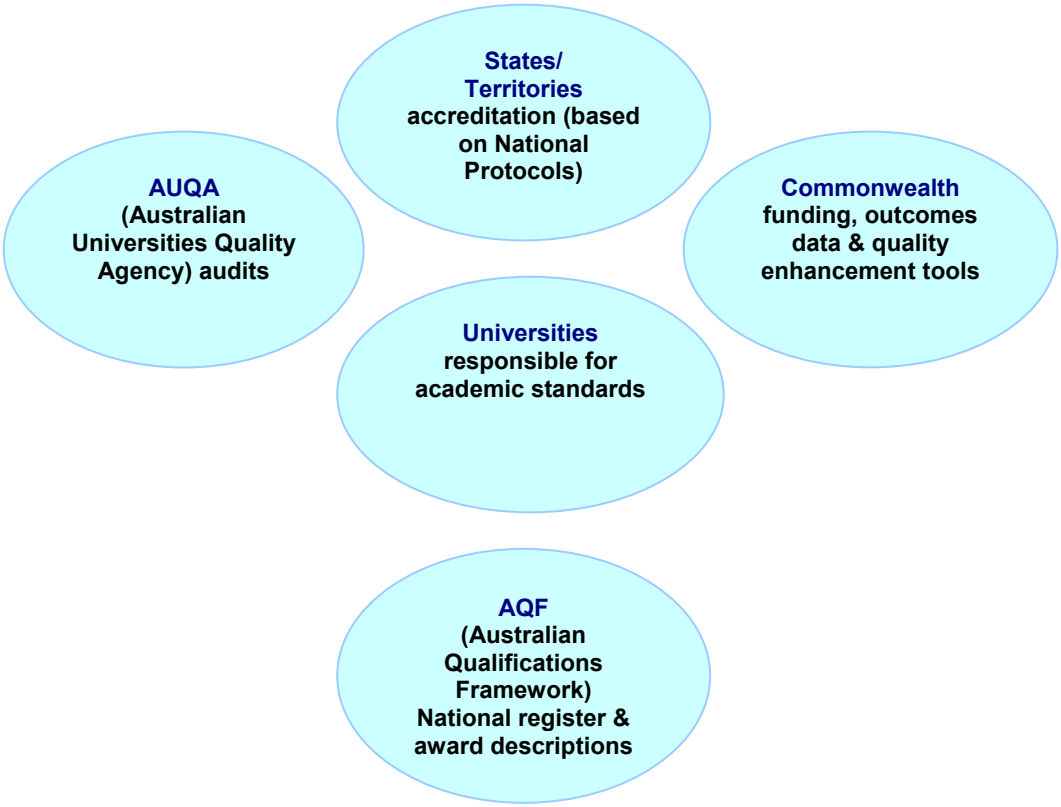
The Australian Quality Assurance Framework

By 2001 a national, multi-layered framework of quality assurance was in place across the higher education sector in Australia, with responsibilities spread among a range of players. The framework is illustrated in figure 6.1. Within this framework universities have primary responsibility for accrediting their own programmes and determining academic standards. State, Territory and Commonwealth governments have responsibilities for accreditation of institutions and courses offered by non self-accrediting providers. The Australian Qualifications Framework has a dual role: to provide descriptors of awards and to provide a register listing recognised universities and accredited higher education courses. Publicly funded universities are accountable to the Commonwealth Government for the quality of their programmes and are required to provide *Quality Assurance and Improvement Plans* annually. Lastly, the Australian Universities Quality Agency monitors, audits and reports on quality assurance in Australian universities and state accreditation agencies.

6.4 Future challenges for the quality assurance process

As in many other countries, higher education in Australia has experienced major change at an unprecedented rate including large-scale structural reorganisation, rapid growth in higher education participation and increasing internationalisation of the higher education market. In response to these developments, Australian governments and the higher education sector have sought to assure the community and prospective students of the high standard of higher education in Australia and to strengthen the Australian quality assurance framework that is in place. The challenge in the future will be to ensure that the framework is robust enough to deal with accelerating change in the higher education market, especially the diversification of higher education providers and the development of new ways of delivering higher education. Concerns over the standards of higher education courses and graduates in Australia will also need to be addressed in future if the reputation of Australian universities is to be maintained and enhanced.

Figure 6.1 Australian Quality Assurance Framework



Increased diversity

Overall the provision of higher education has grown and diversified (see—*The Only Constant is Change* by Webb (2001) in this publication). Australia now has 37 publicly funded universities, many operating from multiple campuses. Two private universities have been established — Bond University and the University of Notre Dame, Australia. There are also a small number of self-accrediting institutions that are not universities which offer courses in specialised fields, such as the Australian Maritime College and the Australian Film, Television and Radio School. In addition, there are now over 80 non self-accrediting private providers offering a range of courses accredited by government accreditation bodies. Courses range from theology, art, music, management, securities, futures, defence, accounting and natural therapies, to psychology and hotel management.

This diversity may be increased in future if more Australians are attracted to study with overseas universities as higher education becomes a more globalised industry. Although there is currently only a small level of interest from overseas universities wishing to operate in Australia, the potential is there for overseas universities and other international higher education providers to provide higher education courses to students from campuses within Australia and through distance education.

One of the results of this diversification is what Chipman (2001) refers to as the 'vertical disintegration' of higher education provision. He argues that the ultimate outcome of higher education, the credentialing of an individual as a university graduate, is the end result of a variety of inputs which typically involve research, scholarship, curriculum design, curriculum preparation, pedagogical design, curriculum delivery, access to an attractive reflective environment, assessment, validation, and documentation. Traditionally such inputs have been

provided to the student on campus at a specific university, however, today such inputs can be supplied by a range of providers and through a variety of delivery modes.

The effect of this approach is to separate the provision of higher education into layers. Specialised providers are then able to concentrate on providing one or some of the layers. An example of such a provider is the corporate university that specialises in providing courses to suit the needs of a particular industry or corporation. Such an approach allows organisations and individuals to assemble the various inputs into an aggregate output such as a particular credential.

In Chipman's view vertical disintegration of higher education is not necessarily a negative process.

> *There is no inherent reason why each of these inputs must be delivered within the same organisation, and often by the very same people – indeed it is increasingly evident that this is not the most cost-effective way of delivering this particular type of final output. Note that this is quite a different issue from the question of whether a wholly vertically integrated arrangement provides the 'best' overall experience for students, or whether it is the 'best' way of ensuring there is immediate linkage between research and teaching. Indeed the desirability of either or both of these ingredients as essential to the cost-effective credentialing of a person as a graduate is at best debatable, and in my view plainly false. Rather the point is that disaggregation is not only possible, it is demonstrably occurring, and is bound to continue to occur, in my opinion at an accelerating rate*.
> (Chipman 2001)

The net result is that in Australia in the future there is likely to be a far greater range of higher education providers delivering various components of a higher education. The type of education they provide may be different to that provided by traditional universities –a *no-frills* approach as opposed to the 'full experience of life on a university campus'. Given these differences it might not be appropriate to judge the quality of such an education using the same criteria for learning experiences and credentials as are applied to traditional universities.

It may be that an assessment of the quality of the learning environment needs to take into account the different requirements of a much more diverse body of students. Not all students who obtain their degrees from universities participate fully in life on-campus. Many undertake their studies through distance education, some work full or part-time and do not have the time to participate; others do not see the experience as particularly relevant. This raises the issue of whether students will forgo the university experience in greater numbers in the future, choosing instead to study with providers who may offer a learning experience more tailored to their needs and certification that is matched to specific employment opportunities.

In any event, Australian universities no longer have a monopoly on the provision of higher education courses. The challenge for State and Territory accreditation authorities will be to develop strategies to cope with the greater diversity and specialisation of higher education providers and with a possible proliferation of non-university private providers and overseas universities seeking accreditation in Australia.

Coverage of the Australian Qualifications Framework

The Australian Qualifications Framework defines qualification levels, titles and guidelines across the school, vocational education and training, and higher education sectors, in order to facilitate the national recognition of outcomes achieved in post-compulsory education[112].

[112] The AQF award guidelines for higher education awards can be viewed at the following link: http://www.aqf.edu.au/pdf/han33-54.pdf

As well as courses accredited by universities or State or Territory accreditation authorities, students are able to undertake high-level courses leading to qualifications through other providers. These courses are often vocationally focused leading to quite specific credentials and may be run under the auspices of companies seeking to ensure a supply of trained employees with particular skills. Such non-standard or corporate courses are proliferating, particularly in the information technology industry. An example of a new type of non-standard course is provided below.

> *Drake Training has launched a boot-camp style IT certification program to fast-track training for IT professionals seeking industry qualifications. The intense exam-preparation courses are designed to get students certified, and offer a full guarantee that each participant will pass. Drake Training national training and operations manager Rob Garrad said the boot-camp format was a cost-effective and efficient way for companies to get their staff certified. "It's not for the faint-hearted. The critical aspect is that you get the commitment of the individual and that they have an IT background", he said. Students are guided through pre-camp preparation by a mentor, providing email, online workshops and telephone technical support, as well as online test-prep sessions and discussion groups. After completing the first part of the course, participants attend an intensive instructor-led class for one or more weeks focusing on hands-on labs and certification exam drills. Students take advantage of on-site test facilities. The first intake of participants is expected to start in December-January. Mr Garrad said the boot-camp IT certification format would take about three to four months to complete from initial assessment. He said the normal certification could take six months to a year.*
> (Foreshew 2001, Australian IT, 25 September).

These courses are usually tailored to meet the specific vocational requirements of students and it is likely that more and more students will opt to undertake such courses in addition to or instead of a university degree. However, such provision is not covered by the Australian Qualification Framework, which does not formally acknowledge the various private provider certificates in the international marketplace, even though such credentials may be highly regarded.

Furthermore, the Australian Qualifications Framework does not include associate degrees yet these degrees are awarded by some universities and therefore given legitimacy even if not formally recognised under the framework. Some private providers would like to offer associate degrees but are currently unable to do so because their courses can only be accredited if they come under an award recognised by the Australian Qualifications Framework. It has been suggested that awards such as the associate degree and private provider (corporate) awards should be included if the framework is to be fully effective as a regulatory instrument. Alternatively, universities could be confined to delivery of awards on the framework.

There has also been some discussion about whether graduate diplomas and graduate certificates and degrees, currently awarded as higher education qualifications under the Australian Qualifications Framework, should be able to be accredited as vocational education awards. This debate, in itself, is a reflection of the fact that the boundaries between the higher education and the vocational education and training sectors are becoming increasingly less distinct. As one of the aims of the framework is to provide nationally consistent recognition of outcomes achieved in both sectors, this places further pressure on the framework's nomenclature and descriptors.

Higher education delivery

At the beginning of the past decade it was still largely the case that the majority students were required to attend a traditional university situated in a fixed geographical location to obtain their higher education qualification. A significant number of students, particularly older students, studied via distance education with information often provided in the form of printed material. Many distance education students were required to participate in short stays on-campus for intensive tuition. By the end of the decade the delivery of higher education to students had been transformed.

Telematics – the combination of the power of computers with the latest developments in telecommunications – has transformed the way students can participate in higher education. Satellite television, satellite data transmission, audio-conferencing, various forms of computer-mediated communication, video-conferencing and of course, the Internet, enable students to receive information in a media-rich format, access databases, interact with other students and their lecturers, share information, participate in tutorials and work collaboratively on-line.

There is evidence that the development of the Internet has been a boon to promoting student/student and student/ staff interaction for external students who no longer have to depend on residential schools to experience peer and student/academic interaction. On the other hand, students excluded previously from conventional campus study by social or economic disadvantage are least likely to be prepared for computer-based learning and more likely to be highly dependent students (Senate Employment, Workplace Relations, Small Business and Education References Committee 2001)[113].

The challenge of the diversification of higher education delivery for quality assurance is to be confident that higher education delivered in non-traditional ways is good quality in terms of pedagogy.

The quality of the course material presented through distance or external education offered by universities can be assured without too much difficulty as course accreditation, review, and assessment is the same as for courses offered to on-campus students. Likewise, external courses offered by non self-accrediting providers must be accredited by State and Territory accreditation authorities. Evaluating the learning environment is somewhat more difficult.

A particular challenge for the future is to ensure that students studying online have a quality e-learning experience and that the online learning environment is not just an electronic rehash of traditional lectures and tutorials. This involves producing high quality software and this can be costly. It also involves designing a mode of instruction that is sensitive to both the technical and learning needs of students. The radical new learning environments made possible by the Internet challenge universities to identify what is essential to a quality higher education learning experience rather than judging quality on the basis of how closely a learning experience resembles one traditionally provided. Many aspects of teaching and learning are quite different for the distance, flexible or virtual institution compared to a campus-based, face-to-face operation and the quality assurance processes need to be correspondingly different (Butterfield et al. 1999).

Modularisation of learning

Traditionally, both higher education students on-campus, as well as students studying by distance education, were expected to work through the units making up their courses in a sequential fashion. Some units were considered harder than others and so were studied later in the course. Some units required prerequisite units. Essentially, learning was seen as

[113] Readers are referred to chapter two on educational developments for more details.

evolutionary, building on a base of existing knowledge. In the 1990s, some universities began to modularise the courses they offered to their students studying on-campus in order to provide students with greater flexibility. In many fields of study there was a reduced emphasis on structured, sequential content as an organising principle of the curriculum with a consequent reduction in pre-requisites and co-requisites.

In 1992 the Open Learning Agency of Australia Pty Ltd was established by a group of eight Australian universities to develop and deliver flexible, post-compulsory education courses at a reasonable cost through media accessible at home. The agency acts as a broker between students and provider institutions that award qualifications under the Australian Qualifications Framework. Through the Open Learning Agency students can effectively study with over 30 Australian universities and combine courses and units from a number of universities. In order to be able to do this, units need to be modularised, so that a course can be built up of a number of discrete units.

The formation of international consortia of universities, such as Universitas 21, may allow students to select modules offered by a number of universities that may be located in different countries. As a result students are no longer confined to the unit offerings of one university but are able to mix and match units from several institutions. The modules offered to students are vouched for by the university that provides them. In the case of the consortium Universitas 21, students will receive multi-jurisdictional accreditation and the consortium has established its own quality assurance arm – U21pedagogica with the aim of maintaining academic integrity (Gilbert 2001). However, university consortia operating in Australia still have to meet Australian requirements.

The major issue relating to modularisation is not the quality of individual units per se but rather whether the modules can be put together to form a coherent degree from the smorgasbord of units that are available; whether students are given enough guidance to select an appropriate sequence of units; and whether students are able to develop necessary foundation skills. A thematic review by the Organisation for Economic Co-operation and Development in 1997 of the initial years of tertiary education in Australia already questioned the coherence of the foundation curriculum in higher education (Skilbeck 1997). Some consider that modularisation is incompatible with the progressive accumulation of knowledge that results from a more structured approach to learning. Modularisation is seen as risking the internal coherence of degrees and reducing the depth of knowledge that graduates have of their discipline (Senate Employment, Workplace Relations, Small Business and Education Reference Committee 2001). On the other hand, modularisation provides students with the opportunity to design and structure their own learning experiences with a coherence that suits their purposes.

A question of standards

In the context of growing international awareness of the importance of quality assurance, at the end of the past decade a number of concerns were expressed about the standard of universities. It was suggested that some universities were marking fee-paying students more leniently than other students—this was labelled as ‘soft-marking’. It was argued that the financial incentive of keeping fee-paying students at a university overruled academic considerations because such fees potentially contributed to academic salaries; allowed the continued existence of courses that might otherwise close and contributed to the financial viability of the university. It was also suggested that financial restraints and massification of higher education had resulted in a decline in the standard of graduates due to a reduction in contact hours between students and staff; higher student/staff ratios; overcrowded classes and over-worked staff combined with a greater number of less able or less well-prepared students attending university (Senate Employment, Workplace Relations, Small Business and Education References Committee 2001).

Concerns about standards raise a number of questions about quality assurance. For example, how can standards at a university actually be determined? What is the comparative worth of marks obtained, or for that matter, qualifications from different faculties and different universities? Is there a need to have some sort of moderating process between universities and also between universities and other institutions, or do we need to recognise that there will be differences?

The role of the Australian Universities Quality Agency does not include any measure of the quality of courses and graduates. The United Kingdom attempted to do this through the observation of teaching, the examination of students' work, as well as review of the documentation of both the subject area and institutional quality assurance practices. However, this approach was rejected by those involved in quality assurance in Australia in the late 1990s as being too prescriptive. In fact, as noted earlier, the British model of quality assurance had to be modified recently because of complaints about its high costs, prescriptive nature and overly bureaucratic approach.

There has always been debate over standards in universities. The issue is whether it is possible, or even desirable, to attempt to maintain standards in an absolute sense or whether it is more useful to recognise that in a diverse system awards will also be diverse. Ultimately it is in the interests of universities to be able to demonstrate the quality of their courses, graduates and research as their success still depends to a considerable extent on their reputations.

Another concern raised about standards in universities is the relative value of particular qualifications. It has previously been argued that because of financial constraints universities are under great pressure to attract students by repackaging their offerings; to make them more attractive by reducing the content of courses, especially higher degrees; and to inflate the value of their awards. For example, there have been suggestions that some Masters programs are little more than rehashed undergraduate degrees with a reduction in length with Masters' students attending the same lectures as undergraduates and having little contact with their supervisors. The problem with such credential creep is that it erodes the status and integrity of postgraduate awards.

The Australian Qualifications Framework sets out the different types of qualifications that can be obtained after the compulsory years of schooling, however, the current descriptions of the learning outcomes for higher education awards are couched in terms of the acquisition of knowledge and the development of skills.

There has been some debate about whether descriptors of university awards should go further and also address student outcomes and standards. In the late 1980s and early 1990s universities were resistant to the concept of national frameworks specifying standards of performance, as they were associated with instrumentalism. At the time, the competency frameworks developed in the vocational education and training sector were industry-driven and highly specified.

However, boundaries have blurred since then. Vocational education and training providers have crossed the boundary between vocational and higher education by offering bachelor and even postgraduate courses. Universities now specify the competencies expected of graduates to some extent, through their articulation of graduate attributes (see Box 6.3 Graduate Attributes). These attributes are generally higher order competencies with a mix of academic and performative learning outcomes reflecting input from academics, professional bodies, employers, graduates and students. Several universities include practical experience components in their award courses, reflecting the value they place on performative learning and tacit skill development such as those required for effective teamwork and communication. Some universities have gone so far as to develop graduate capability frameworks.

6.5 Conclusion

Over the decade there has been a dramatic growth in higher education demand and provision, both within Australia and worldwide. The increasing volume and diversity of the student population has led many organisations to review and diversify not only their course offerings but many aspects of internal university organisation. In line with international trends, Australian universities have moved to strengthen their reporting and accountability procedures. These developments have sharpened the interest in the nature and value of the services universities provide to the community through teaching, research and related functions.

Major developments in information technology have led to changes in study requirements, teaching and learning arrangements and in areas such as research organisation and university administrative practice. Information technology has facilitated a greater diversity of providers and modes of delivery. The advent of non-traditional providers of higher education, for example, the emergence of virtual universities, the growth of private institutions, the growth of multi-campus and transnational institutions has challenged the sector itself.

At the same time, Australian universities have proved themselves highly effective and entrepreneurial in the 1990s in expanding their student intakes well beyond Australia's borders. Higher education has become a major export industry. To compete with other countries it has become even more important for Australia to have a quality assurance system that protects the reputation of Australian universities. This is especially so as other national governments have moved to develop national systems of external audit as a base for hallmarking the quality of teaching and research at their tertiary level institutions.

A future challenge for the quality assurance system in Australia will be to ensure that it can:

- keep pace with the proliferation of new higher education providers with different ways of delivering, packaging and marketing higher education;
- keep track of the quality of higher education provision in a more fragmented and flexible environment; and
- strike the right balance between protecting consumers, maintaining reputation and encouraging innovation.