

The Australian University System

**An Important Background
For
Students
Seeking to Undertake
Undergraduate or Graduate (Postgraduate) Studies
In
Australia**

by

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In order to get the best out of university studies, one needs to have a reasonable understanding of the way in which the Australian system of universities is organised, and how this impacts upon students and programs of study. Many students go through an entire degree program without ever grasping the structure, benefits and inadequacies of the system. However, to do so is to risk missing opportunities that may be available for change, and to leave a subsequent generation of students exposed to inadequacies or shortcomings that remain unaddressed.

When entering into university studies, every student needs to understand that the benefits they have are generally the result of work from those who have gone before, and the difficulties and problems that they find, may well have been overcome if the previous generation of students had sought to tackle them.

The good news about the Australian university system, for students, parents and secondary school teachers, is that they all own the system to some extent, and they have the opportunity; the right, and the responsibility to help ensure that it performs well and serves the needs of students and society. As a system of tertiary study, largely funded by tax-payers and students, the Australian system has mechanisms available to enable people from all areas of life to contribute to its direction, relevance and performance. As you read further through this document you will come to understand that public contributions to the debate about our universities are fundamental to augmenting the directions set by governments,

academics, researchers and public servants. Universities need to change and evolve with time and, without positive input from the public, there is a risk of stagnation or of vested interest groups skewing directions away from those that best serve society.

Needless to say, the most important contributions to university directions need to come from the students themselves, who experience first-hand all of the inherent advantages and disadvantages of the system that currently exists. However, in order to make use of what currently exists, and to contribute to positive changes, students need to come to terms with why and how the current system came to be as it is.

The first step in understanding the benefits and shortcomings of the existing system of universities comes from understanding its history and evolution. The system of universities in Australia has come about as a result of a series of well-documented changes and reforms over the course of more than one and a half centuries. These have had mixed success but have, nevertheless, delivered an overall system which performs at a credible, if not outstanding, level by international standards.

To begin with, it needs to be understood that Australian universities are relatively new compared to those in Europe and North America. For example, The University of Bologna was founded in the 11th Century (c1088) and is regarded as the oldest university in Europe. By comparison, Cambridge University was founded in the 13th Century and Harvard University was founded in the 17th Century. Australia's oldest university (the University of

Sydney) was founded in 1851, followed closely by the University of Melbourne in 1853. So, Australia's oldest universities are some seven centuries younger than Europe's oldest, and two centuries younger than North America's oldest. In the university world, age often equates to prestige because the oldest universities were invariably home to the greatest scientists, philosophers and thinkers of their age. When people think of scientific or philosophical or medical history, they often think of the universities that were home to those who brought about major changes to our society. Whether the prestige associated with that history translates into something more tangible, in terms of learning, is something more complex that we will explore in more detail as we go through this book.

One of the interesting features about universities, both in Australia and internationally, is that the older ones tend to predate their surrounding political systems and, in some cases, even the nations which currently support them. In the Australian context, four of the nation's universities (Sydney, Melbourne, Adelaide and Tasmania) were founded prior to Australia's federation, and hence are a product of the various colonial governments of their time. Even though the remainder of those that were formed during the 20th Century post-dated federation, all were founded on state based models under various state Acts – with one notable exception. That exception was the Australian National University (ANU) which was founded by a Federal Act of Parliament in 1946.

Table 2.1 shows the list of universities in Australia, as of 2007, in order of their formation. Note that many of the universities listed

in Table 2.1 were originally founded as other types of educational organisations (typically technical colleges), long before being proclaimed as universities. It also needs to be noted that there are other tertiary organisations that could potentially be included in the list of Table 2.1 but they do not bear the actual title of university.

Year of Establishment as University	Year of Original Establishment	University	Notes
1851	1851	University of Sydney	Pre-Federation (Go8)
1853	1853	University of Melbourne	Pre-Federation (Go8)
1874	1874	University of Adelaide	Pre-Federation (Go8)
1890	1890	University of Tasmania	Pre-Federation
1909	1909	University of Queensland	(Go8)
1911	1911	University of Western Australia	(Go8)
1946	1946	Australian National University	Established by Act of Federal Parliament (Go8)
1949	1949	University of New South Wales	(Go8)
1954	1938	University of New England	Regional
1958	1958	Monash University	(Go8)
1964	1964	Macquarie University	
1965	1965	LaTrobe University	
1965	1965	University of Newcastle	Regional
1966	1966	Flinders University	
1970	1970	James Cook University	Regional
1971	1971	Griffith University	Regional
1973	1973	Murdoch University	Regional
1974	1974	Deakin University	Regional
1975	1951	University of Wollongong	Regional
1986	1900	Curtin University of Technology	
1988/	1974	Northern Territory University/	Dawkins' Reforms

2003		Charles Darwin University	
1988	1882	Queensland University of Technology	Dawkins' Reforms
1988	1965	University of Technology Sydney	Dawkins' Reforms
1989	1989	Bond University	Private University
1989	1989	University of Western Sydney	Dawkins' Reforms
1990	1990	Charles Sturt University	Dawkins' Reforms Regional University
1990	1967	University of Canberra	Dawkins' Reforms Regional University
1990	1990	University of Notre Dame	Dawkins' Reforms
1991	1850	Australian Catholic University	Dawkins' Reforms
1991	1902	Edith Cowen University	Dawkins' Reforms
1991	1991	University of South Australia	Dawkins' Reforms
1992	1967	Central Queensland University	Dawkins' Reforms Regional University
1992	1887	Royal Melbourne Institute of Technology University	Dawkins' Reforms
1992	1908	Swinburne University of Technology	Dawkins' Reforms
1992	1967	University of Southern Queensland	Dawkins' Reforms
1992	1916	Victoria University	Dawkins' Reforms
1994	1970	Southern Cross University	Regional University
1994	1871	University of Ballarat	Regional University
1999	1995	University of the Sunshine Coast	Regional University

Table 2.1 – Australian Universities as of 2007 (by Year of Establishment)

The evolution of universities in Australia, from 1851 until 1911, was relatively unremarkable, in the sense that it was associated with the formation of six founding universities in response to the development of the Australian colonies. The period from 1911 through to 1987 reflected strong, steady growth in student numbers as a result of the growing nation; post-war activity, and increasing immigration. As Table 2.1 illustrates, many of the universities that

were formed between 1911 and 1987 were in response to growing metropolitan areas or growing regional centres in Australia.

In 1911, there were only approximately 3,000 students enrolled in Australia's emerging universities – representing only 0.1% of the nation's population. These students generally either paid fees or received scholarships from various governments (generally the states as a legacy of the original founding Acts). The exception to this was the University of Western Australia which provided free tuition as a result of endowments. By the end of the Second World War, however, the Australian Government decided to fund university scholarships for ex-servicemen. The result was that by the late 1940s, the number of students in Australia's universities had risen to some 32,000. By the late 1950s, the number had again risen to some 50,000 students.

As a consequence of the strong growth in university student numbers, the Federal Government held an enquiry into universities in the late 1950s and discovered that they were severely under-funded. The initial solution was to provide a range of federal grants to the universities. As with all government grants, acceptance of funding meant that certain federally specified conditions had to be met, and this funding arrangement proved to be the first time the Federal Government had exerted influence (albeit limited) over the state enacted universities.

By the early 1960s, it became apparent that student numbers were continuing to rise, and a subsequent review of Australia's tertiary education system led to the Federal Government

rationalising tertiary education through the formation of a two-tier system of tertiary education, which was (then) referred to as a binary system. This was composed of:

- Universities
- Colleges of Advanced Education (CAEs), including Institutes of Technology.

In addition to these, there existed a collection of technical schools and colleges which were, for all intents and purposes, considered to be secondary level education (i.e., alternatives to high schools) and, hence, not part of the tertiary system.

In essence, the universities were differentiated from the CAEs in terms of the sorts of degrees that they could offer, and the sorts of activities that they could undertake. Universities could offer diplomas and degrees through to Doctoral level – they could also get government grants to conduct research. CAEs, on the other hand, had to focus on vocational education and, although permitted to offer certificates, diplomas and degrees up to Bachelor's level, were generally not permitted to offer research degrees at Master's or PhD level.

The binary system of tertiary education proved to be a reasonably good system that enabled a limited number of universities to focus upon research, and the remaining colleges of advanced education to focus on vocational and professional training. However, there were some flaws in the concept, not the least of which was the fact that an increasing percentage of the population

wanted university undergraduate and postgraduate degree programs. Notwithstanding these limitations, the binary system remained in place for a quarter of a century.

In the early 1970s, during the operation of the binary system of tertiary education, the (then) Federal Government abolished fees for universities and CAEs, which helped to cement the growth of the overall system. In abolishing all fees, however, the Federal Government had assumed full funding control of the tertiary education system. At this point, Australia's tertiary education system had two masters – the Federal Government, who imposed control through conditions placed on funding, and state governments who maintained legislative control by virtue of the various Acts of establishment.

An interesting feature of Table 2.1 is that only 19 universities were created in Australia in the 136 year period from 1851 to 1987 and, in the period from 1987 to 1995, an additional 20 educational organisations were proclaimed as universities. In other words, in just over eight years, the number of universities in Australia more than doubled. This change was not an anomaly but, rather, part of a radical series of reforms introduced by the (then) Minister for Employment, Education and Training, John Dawkins, commencing in 1987 with the issuing of a "Green Paper" on reform (with implementation in the late 1980s and early 1990s). This change to the system was not a uniquely Australian phenomenon. In fact, many developing countries were experiencing an increased demand for university education, and change was inevitable.

There were many factors that contributed to the perceived need for the Dawkins' reforms of the Australian higher education system. By the 1980s, enrolments in universities and CAEs were in excess of 400,000 (almost 3% of the population) – a tenfold increase over three decades, and a tripling in the decade from the 1970s to the 1980s. The ideal of tax-payers continuing to provide “free” tertiary education, given the scale of growth in this decade, was under stress. At the same time, it became apparent that the binary system of tertiary education was breaking down. CAEs had lobbied for (and succeeded in gaining) the right to offer postgraduate qualifications at Graduate Diploma, Master's and PhD level. Many CAEs had ramped up their research programs to include postdoctoral researchers, and had begun lobbying to have their staff recognised as professors. The CAEs also wanted access to Federal Government research funds.

In Victoria in 1974, the state government had decided, in a bold move, to convert the (then) Gordon Institute in Geelong into a university, which became known as Deakin. By the 1980s, other states were pursuing similar options with their CAEs.

For all of these reasons, combined with a growing demand for postgraduate qualifications, it became clear that the retention of the binary system was impractical, and that a unified national system of universities should be established.

The move to a unified national system of universities led to numerous mergers between CAEs, universities and other technical institutions in order to create the critical mass required for university

status. One of the few CAEs that did not merge was the Swinburne Institute of Technology, which achieved university status in 1992 and continued to exist, in its own right, as one of the nation's smallest universities. Other, similar-sized, institutes of technology, such as Chisholm, were generally absorbed into chosen partner universities, such as Monash. The Footscray Institute of Technology combined with a few other educational elements to become the Victoria University of Technology (and, subsequently, the Victoria University). All of these entities formed the new generation of Australian universities (sometimes referred to as the post-1987 universities).

At the same time as radical changes were occurring in the university sector, the vocational education and training (VET) sector was also undergoing changes of its own. Originally initiated in the 19th Century, and largely based upon technical colleges offering secondary education alternatives, VET was primarily designed to provide males (commonly with existing employment or apprenticeship arrangements) with training in hard technology/trade areas for manufacturing, mining and construction industries. By the mid 1970s, however, it became apparent that society was changing – manufacturing was beginning to decline and more females were entering the workforce. High technology industries were emerging; new business models were forming, and it was apparent that the old colleges could not meet industry or societal demands into the future.

In 1974, the Kangan Report (“Needs in Technical and Further Education”) planted the seeds for what would become the TAFE system in Australia. In contrast to the university system, however, the TAFE system engendered some degree of formal cooperation from federal and state governments. In 1992, these governments worked together to produce the Australian National Training Authority (ANTA) to support vocational education. In the late 1990s, the Federal Government established a National Training Framework and, by 2005, it was decided to move ANTA under the auspices of the same federal department that was responsible for universities – the Department of Education, Science and Training (DEST).

The TAFE system, like the old CAE system, had ambitions beyond its original charter, largely driven by changing demands from students and employers, who wanted more than trade certificate level training. The notion of retaining TAFE as a secondary level of education was unrealistic, and its role in tertiary education was growing. By the late 1990s, the TAFE system wanted to have the opportunity to grant Bachelor’s degrees, just like the universities. In 2002, TAFE colleges had indeed secured the right to offer degrees – and so the cycle of academic escalation continued through a new generation of technical colleges.

The pursuit of higher academic standing, originally by CAEs, and subsequently TAFE, was not a pure ego-driven phenomenon. It actually reflected the increasing complexity of society and industry. The days of trades, such as stone-masonry, for example, had largely

gone and had been replaced with new trades and technical areas, based upon technologies such as computer controlled production machinery, that required a higher level of academic understanding and study.

So it was, by virtue of technological and societal change, combined with government reforms, that by 2007 Australia had a tertiary system composed of some 40 universities and a large collection of TAFE colleges. Between them, these organizations could award various certificates, diplomas and degrees – the Australian Qualifications Framework (AQF) currently provides a structure that defines the actual awards that can be issued by the various tertiary institutions. In a broader sense, the end result of all the changes, however, was that the CAE colleges of old had become the universities of new; and the technical colleges of old had become the TAFE colleges of new. All these elements are now an integral part of Australian tertiary education.

The Dawkins' reforms of the Australian university system were therefore not without their shortcomings, despite having brought a number of advantages to tertiary education. One problem with the reforms was that there was an intrinsic presumption that the nation could rapidly move from a society that had the intellectual capacity to staff 19 universities, to one that had the intellectual capacity to staff some 40 universities at the same level. Self-evidently, this was not the case, even though many CAEs had staff who were qualified to be university lecturers.

Another presumption made by the new “system” (although Dawkins himself never actually demanded it) was that 40 universities could potentially operate at the same international research levels as the 19 that had existed previously – this was again proven to be false, largely because the number of universities competing for federal research grants had increased from 19 to 40 but the research funding provided by government was not increased proportionately. Over the two decades to 2007, government expenditure on research and development had actually tripled but then it needs to be remembered that the post-1987 university system had effectively doubled in size and research ambition in just eight years.

By 2007, it was clear that the Dawkins’ reforms, which originally sought to abolish the binary system of higher education and create a “unified national system” of universities had, in reality, created a new binary system, composed of universities and TAFE colleges. Even within the universities, there emerged another binary system of high research performance universities and low research performance universities – rich cousins and poor cousins. The harsh reality for many of the post-1987 universities was that it was simply not possible to ramp up levels of research to the extent where they could be competitive with the established universities in the field – particularly if the new universities were small and lacking research infrastructure. To make matters worse, with little or no new money available from the Federal Government, some of the post-1987 universities had to make sacrifices in the quality of undergraduate

education and infrastructure to fund their entry into the research arena.

The American Poet John Ciardi (who was renowned internationally for his translation of Dante's Divine Comedy and Inferno) once uncharitably summed up the relentless quest that colleges have to upwardly change their status in the following way:

"A university is what a college becomes when the faculty loses interest in students."

Unfortunately, there is substantial truth in this observation because the transition from college to university signifies a dilution of interest in undergraduate teaching to realise a combination of teaching and research. In Australia, some of the technical colleges which subsequently became universities in fact proved the truth in Ciardi's observations – having been far better as technical colleges than they ever were subsequently as universities. Nevertheless, it was difficult to argue against the rising tide of interest in higher qualifications, and the need for educational organisations to provide opportunities for them.

The other fundamental problem with the Dawkins' reforms was that spreading research, which had previously been conducted by 19 universities, over 40 universities, had the effect of diluting the overall system. Newly established (post-1987) universities sought to poach staff from established universities and were prepared to offer higher level appointments to entice leaders. This created some antipathy from established universities who felt that the new players were over-promoting under-qualified staff (whether this was a

justified assumption or not). Even then, the research outcomes in the new universities, viewed at an international level, were patchy at best, purely because they were small in scale. At the same time, these patchy new activities drew expertise away from traditional players who had previously had critical mass.

By 2006, cracks were appearing in the unified system (which is, after all, a system composed of funding and expertise) simply because it could not, in practice, sustain a large number of players all having similar undergraduate offerings, and all seeking to be research intensive. In November of that year, the Melbourne Institute published a “discipline by discipline” review of Australia’s universities, looking at factors such as student satisfaction, international standing, research publications, etc. Much of the data used in the survey was derived from the Federal Government’s own figures, and some was derived from surveys. For each discipline, the review process awarded a university a score of between zero and 100. The end result was a discipline by discipline profile of Australia’s universities in both teaching and research. Interestingly, when the discipline performance figures were averaged out for each university, it became apparent that only six of Australia’s universities had a performance average above 50%. Many averaged around 30%.

Table 2.2 shows the Australian universities listed in descending order of student numbers. Next to the student numbers for each university is the average performance of that institution across all its stated disciplines (as derived from the Melbourne

Institute Study). Generally, universities with over 25,000 students tend to perform far better than their smaller counterparts – partly because they have critical mass in research, and partly because they have larger funding (as a result of their larger numbers) to better resource their undergraduate educational programs. The obvious exception to the “bigger is better” trend that emerges from the figures is the Australian National University (ANU) which, although small, started life with a different (in fact preferential) funding model to other Australian universities, and was therefore able to build up significant resources and critical mass in research. In fact, by many international measures and rankings, the ANU is regarded as Australia’s leading university.

University	Student Numbers In 2006	Average Performance Across Disciplines* %
Monash University	49,829	67.91
The University of Sydney	42,063	80.20
The University of Melbourne	39,961	91.14
RMIT University	35,059	29.96
The University of New South Wales	34,877	65.09
Queensland University of Technology	34,190	39.93
The University of Queensland	33,982	67.49
Curtin University of Technology	33,834	44.26
Griffith University	31,651	30.31
University of Western Sydney	30,250	27.60
Deakin University	29,989	30.68
University of Technology, Sydney	29,510	31.75
University of South Australia	28,691	32.84
Charles Sturt University	28,285	25.20

Macquarie University	26,847	34.45
La Trobe University	25,274	35.97
The University of Newcastle	22,831	31.46
Central Queensland University	20,691	25.04
Edith Cowan University	20,637	22.34
University of Southern Queensland	19,389	29.00
University of Wollongong	18,950	32.55
Victoria University	17,912	26.48
The University of Adelaide	17,669	36.74
The University of Western Australia	16,396	46.27
University of Tasmania	15,543	26.22
The University of New England	15,402	29.98
Swinburne University of Technology	14,345	29.45
The Flinders University of South Australia	13,658	25.83
The Australian National University	13,055	77.02
James Cook University	13,011	22.90
Australian Catholic University	12,594	N/A
Murdoch University	12,085	30.80
Southern Cross University	11,864	23.95
University of Canberra	9,637	23.24
University of Ballarat	8,584	24.05
The University of Notre Dame Australia	4,954	N/A
University of the Sunshine Coast	4,648	24.50
Charles Darwin University	4,423	18.05
Bond University	3,263	13.50
Total Student Numbers	845,833	

Table 2.2 – Australian Universities in Order of Total Student Numbers (2006) (Figures From DEST) and Relative Average Performance Across Disciplines (Figures from Melbourne Institute 2006)

As the first decade of the 21st Century rolled on, it therefore became evident that Australia's system of universities was in a new state of flux. In 2006, the Federal Education Minister signalled that the "one size fits all" approach to universities that had been the hallmark of the Dawkins' reforms was nearing an end. The Federal Government signalled an evolving system composed of only perhaps a dozen comprehensive/mainstream universities, with the remainder focusing on a limited range of specialised areas. There were also prospects of new, commercial players being granted the right to call themselves universities.

Those universities that were either large in terms of student numbers, or strong in terms of research performance, clearly had a sustainable future in the mainstream. Those that were either small in student numbers or weak in research performance had a difficult road ahead, and faced competition from the encroaching TAFE sector, with its lower staffing costs and potential to offer professional degrees.

TAFE colleges, however, are not the only threat to the existing university system in Australia. The system also faces competition from international universities seeking to establish campuses in Australia, and from private specialist colleges that can offer fast-track degrees more efficiently – many, including vice chancellors of existing universities, have argued that such private providers can also deliver educational programs more professionally than traditional universities.

Ironically, Australian universities were amongst the first and most successful players in the burgeoning educational markets in Asia in the late 1980s and 1990s. Because of their early entry into these markets, Australian universities picked up a disproportionately high share of the international fee-paying students. Export education became one of Australia's largest export earners. In a number of cases, Australian universities also chose to establish campuses in Asia and, while a small number of these have been successful, some have succumbed to increasing local competition in the region.

The reality for Australian universities was that their initial successes in the Asian markets were not sustainable. The rapid economic growth of countries such as China and India, from developing nations into economic superpowers, was accompanied by a corresponding growth in new (and well equipped) universities in those countries. In addition to this, the large North American and European universities, who had significantly more "brand value" than Australian universities, had also recognised the benefits of establishing bases in Asia. Within the Asian customer countries themselves, there was a recognition of the futility of sending money and students overseas for tertiary education, and these countries (particularly China and India) began a major build up of their own tertiary education sectors. Many of the new universities in these countries dwarf even the best Australian universities in terms of their infrastructure and facilities. The message from the changing Asian landscape was clear – the lucrative international student market was not a long term proposition for many of Australia's universities.

Notwithstanding all the ups and downs of more than one and a half centuries of evolution, by 2007, there were in the order of 900,000+ students enrolled in Australia's system of universities – this represented almost 5% of the population, or a 50-fold increase from 1910. So, as the Iranian proverb goes, “...*the curs may bay but the caravan moves on...*”

For better or worse, the Dawkins' reforms of the Australian university system set the agenda for the current collection of universities, and have largely contributed to the nation's relative international standing in higher education and research. This standing can perhaps best be summarised as credible in general, and good in parts. Keeping in mind the size and location of Australia as a country, this is no small achievement in its own right. As far as students are concerned, Australia's universities are internationally recognised as providing a reasonable quality of tertiary education, and many international professional bodies recognise Australian degrees as equivalent to those derived from European and North American universities.

In terms of international standing in research and academia, the Nobel Prize is universally regarded as one benchmark of excellence. In regard to Nobel Prizes, it is sometimes observed that Australia has been awarded more of these, per capita, than any other country (although the actual citizenship of various prize winners is often a subject of debate). Ironically, however, of the ten Nobel Prize winners that can arguably be attributed to Australia, only three received their awards while still actually affiliated with Australian

universities or research institutes – these being Sir Frank Macfarlane Burnet at the Walter and Eliza Hall Institute (1960); Sir John Eccles at the Australian National University (1963), and Barry Marshall at the University of Western Australia (2005).

To give some comparison with other world famous institutions, 32 Nobel Prize winners received their awards while affiliated with the University of California, and 31 received their Nobel Prizes while affiliated with Harvard University. This gives some insight into the enormity of the international competition in terms of universities, and to the role of Australia as a relatively small player in a very large field with many renowned institutions. Fundamentally, the gap between Australia's best universities and the world's best universities is significant, even though a few Australian universities are regularly ranked amongst the top 100 universities in the world.

Even when Australian researchers perform well at their own universities, there is therefore a natural attraction for them towards institutions that are either historically associated with research excellence, or are located at the centre of a region known for academic/intellectual prowess (such as Boston Massachusetts). Once researchers can demonstrate a high level of international standing, the funding opportunities in North America and Europe are significantly greater. So, even though Australia has a proven capacity to produce some of the world's great intellects and researchers from within its university ranks, Australian universities

do not generally benefit greatly from their presence after they become successful.

Successive governments have attempted to thwart the outflow of high calibre researchers from Australia by offering large salary incentives through fellowships. The problem, however, is that it is not simply salaries that attracts international researchers, but a collection of factors including infrastructure, technical support, research grants, access to high technology industry partners, and so on. For these reasons, Australian universities are at a disadvantage compared to those in parts of Europe and North America.

The key point that we can learn from this history is that governments tend to make many decisions about the number, composition and funding of universities in Australia but, in the international context, many of these decisions do not have a significant impact because the nation remains a small player in the academic arena. In other words, it is one thing for governments to re-label former technical colleges as universities, or to merge various institutions into new universities but quite another to tackle the creation of an internationally regarded university, that can compete with the likes of a Cambridge or Harvard – this is a process that can take many decades or even centuries – if it can occur at all.

There is an oft repeated anecdote about a visitor to Cambridge University who asks one of the gardeners how they got the lawns so green and lush. The gardener replies that all they did was plant the seeds; roll the lawn; water it, and tend to it for six centuries. This parable profoundly summarises the difficulty of building a

university – governments and benefactors plant the seeds, vice chancellors tend to them but, in the final analysis, it is the centuries of culture and tradition that define the lushness of the end product. That culture and tradition is largely built upon the students who attend the university, and the subsequent contribution that they make to society. Some academics have even referred to their graduates as the “academic tree” of their university, and measure the success of their university and its research by the success of their academic tree.

The world’s most successful universities tend to be those that have the most successful students in various facets of science, business, medicine, philosophy or society. This creates a positive cycle that tends to attract the best students from all over the world, who then often go on to be successful graduates, and so on.

The message that comes to us from this history and evolution of Australian universities is significant. Students need to be aware that, from time to time, and for various reasons (both altruistic and expedient), governments choose to change universities; their funding, and their directions – but, in the final analysis, the actual real change that takes place in terms of learning and international impact is often minimal. Universities, learning and research change at a very slow pace, and this pace is defined by the culture of the university and the calibre of the students – and, ultimately, what those students achieve after they graduate and then feed back into the system.

One may then well ask what relevance state or federal control of universities have to the students who study in them here in Australia. The answer is that they do have significance. Firstly, because all Australian universities receive a portion of their funding from the Australian Federal Government and, secondly, because legislative control of nearly all Australian universities resides with respective state governments. This means that the roles of the two layers of government are somewhat complex when it comes to control of universities.

In simple terms, the relationship between state and federal governments in the context of university control comes down to the old adage, *“he who pays the piper calls the tune”*. Universities are governed by various Acts of Parliament (largely state) which provide a broad framework for how they should operate. Universities are legally bound to abide the provisions of the relevant Act under which they are established. Beyond the Act, and in keeping with it, universities all have a large array of internal policies and procedures that provide a frame of reference for all staff, and thereby enable the university as an entity to abide by the law; to provide integrity, impartiality, fairness and equity in its dealings with students, staff and other stakeholders. Universities also have a wide range of legal contracts with external organizations, including government departments, industry, staff, and so on. Universities are also bound by numerous other forms of government legislation encompassing issues such as industrial relations; occupational health and safety; equity, etc. Some of this legislation is state based and some is federal.

The Federal Government, as the entity who essentially “pays the piper” is the one which, in practice, exerts the greatest amount of control over the system. In essence, by creating funding models for universities that encourage particular types of behaviour and attributes, and discourage others, it is the Federal Government that influences how universities behave in the short term. The relationship between universities and state governments is somewhat more abstract even though it is the state governments that generally have legislative control over the respective universities. In practical terms, the situation is very awkward in the sense that it would be pointless, for example, in having a state government enact legislation which forces a university to be disadvantaged under the Federal Government funding model, to the extent that it would have to close. However, the converse situation may arise where a state government could assist with legislative changes that improve the performance of universities and enable them to attract more Federal Government funding.

University leaders are generally aware of the complexities of the arrangements that exist between the Federal Government and various state governments. This is exacerbated when the Federal Government and a particular state government are from different political parties, with differing views on tertiary education, which is often the case. State governments are generally represented on university councils, which are the governing bodies (elected and appointed) to which the chief executive officers (vice chancellors) report. The Federal Government generally communicates its intentions to universities via policy releases and, more importantly,

through the complex formulae which are used to determine the funds provided to a given university in a particular year.

The Federal Government department that administers universities and research is called the Department of Education Science and Training (DEST) – this Department has had various titles over the decades, reflecting a variety of changing roles. DEST also administers funds, on behalf of the Federal Government, which are provided to universities to undertake research. These are administered through the Australian Research Council (ARC). Medical research funding for universities is administered by the National Health and Medical Research Council (NHMRC) which is within the portfolio of the Commonwealth Department of Health and Ageing.

The two granting agencies (ARC and NHMRC) are typical of the arrangements that are in place in many countries under various, different titles. In general, medical research is given special priority in terms of research funding, over and above all other areas which are collectively funded through the ARC. The special consideration given to funding of medical research (through a special body such as the NHMRC) is common practice in many countries. In the United States, for example, there are analogous entities to the ARC and NHMRC called the National Science Foundation (NSF) and the National Institute of Health (NIH). The separation of university research funding into “medical research” and “everything else” probably doesn’t make a great deal of sense in the modern world, where science, technology and medicine are all interrelated, but it

has historical precedent and is generally rationalised by national and strategic priorities in health.

The two types of research funding also help to explain why many universities seek to have medicine as a core area of their faculty composition – not only is medicine regarded as a prestige discipline, but it also enables universities to dip into a much larger research funding pool at a federal level.

Australia's universities have their own lobby group which liaises with the Federal Government in the interests of universities as a whole, rather than just for the benefit of a single institution. This lobby group is called Universities Australia (UA) – formerly the Australian Vice Chancellors Committee (AVCC). All Australian universities are represented therein. Although governments are not bound by the machinations of UA, the fact that it represents a consensus view of all universities tends to give it more credibility with governments than would be accorded to an individual university.

Some of Australia's universities have also formed their own special interest groups to represent particular vested interests. For example, the "Group of 8" (Go8) is a lobby group that represents the vested interests of five of the original six founding universities of Australia, plus Monash, ANU and the University of New South Wales. Another collective group is the Australian Technology Network (ATN) which represents the vested interests of a selection of technological universities.

In practice, the UA, Go8 and ATN tend to deliver compromise positions, based upon committee decisions, to various governments. It would therefore be unlikely that any of these entities would be the source of radical reform for the system. As a general rule, these entities are associated with lobbying for more funding, or for requesting preferential treatment for one vested lobby group over another.

As far as undergraduate students are concerned, most will not be directly influenced (or affected) by the various research funding schemes or by the various university lobby groups, so these may be of little more than passing interest. However, undergraduate students are directly affected by changes in Federal Government policy in regard to funding education. The policies that are put in place by the Federal Government translate directly into how much it costs to get a university education; what proportion of the cost will be carried by the students and the tax-payers. Over and above Federal Government policy, universities are given some latitude in what fees they can charge and how these can be charged.

In 1989, the Federal Government introduced a system of payments for university education known as the Higher Education Contribution Scheme or HECS. Essentially, under the scheme, university students pay a fraction of the total cost of their education, with the remainder funded by tax-payers through the Federal Government. The payments for the cost fraction incurred by the students can either be paid up-front, or after graduation, when a threshold income limit is exceeded. There are three major benefits of

the HECS system. The first is that students do not require a large sum of money up-front to undertake a university degree. The second is that because they have a financial responsibility associated with their course, they take it much more seriously than if it were provided at no cost. The third is that students who do not derive a professional benefit from their degree (i.e., never exceed the threshold income for repayment) do not end up being disadvantaged by a debt burden (although they may incur a debt that needs to be paid from their estate).

In fact, the HECS system received broad support after its introduction, and even the (then) Opposition embraced it when they came into government in 1996. It has therefore remained in place ever since. The HECS system is often cited in educational forums around the world as an equitable means of funding university study.

Some universities find the HECS system somewhat restrictive because it does not provide sufficient latitude for them to charge whatever they see fit for courses. For this reason, universities have lobbied the Federal Government to give them the opportunity to charge full fees for undergraduate courses. As a general rule, in Australia, full fees can be charged for all postgraduate course places but, in the context of undergraduate places, universities need to fill all their government allocated HECS places before they are permitted to offer additional places at full fee.

The demand for full-fee undergraduate courses in Australia is relatively limited because it essentially requires students to pay several times the amount that they would pay for an equivalent

HECS place in the system (the full cost of which is subsidised by taxpayers). Hence, there is no incentive for students to opt for full fees unless they are unable to achieve the academic target required for a HECS funded place.

In 2006, the first university in Australia to endeavour to break away from a pure HECS funding model was the University of Melbourne, which introduced the so-called Melbourne Model, with the first year of implementation in 2008. The objective of the Melbourne Model was to divide professional courses into two parts – a generic undergraduate degree program, which could be undertaken through HECS funding, and a postgraduate professional degree (in, say, engineering or law) which had to be funded through full fees (for which students could apply for “fee help”). The Melbourne Model was based upon the emerging “Bologna Model” in Europe, whose objective was to broaden undergraduate education and move specialisation into the postgraduate arena. As an adaptation of the Bologna Model, the Melbourne Model provides a much broader approach to undergraduate education but also significantly increases the cost burden and duration of a professional degree. With each additional year of education required for a professional qualification, graduates forego a year of income, so the costs of such an approach are considerable, notwithstanding that there may be longer term professional benefits from a broader undergraduate study program.

In 2007, the Federal Government also relaxed the conditions under which universities could charge full fees for undergraduate

education. This, too, provided a departure from the traditional HECS funding arrangement, with the objective being to increase the total funding available to universities and, thereby, improve the ability to offer places. Again, full fees for undergraduate education tend to be more attractive to international students who cannot make use of the leveraged funding arrangement provided by HECS.

Fees are not the only issues that are influenced by Federal Government policy and which impact directly upon students. Other issues, such as provision of supporting services, living allowances, infrastructure funding for buildings, laboratories, etc. can also be affected by federal decisions.

In general, annual learning and teaching performance surveys, published by the Federal Government, indicate that the majority of university students in Australia are satisfied with their undergraduate courses and learning. Of those who aren't, the bulk of these seek some form of redress through internal university mechanisms, and very few generally contact the government or its public service departments. However, the practice of students bringing items of concern directly to the attention of the appropriate federal or state minister can have positive benefits for successor students who may otherwise have to endure unresolved issues.

In general, when students are at university, they will have some sense (if not a direct accounting) of how well they believe their course is resourced relative to their fees, and how well they believe the university serves their educational and support needs. They will also have direct experience in whether or not they have been treated

fairly, or whether the university's standards of learning meet employer expectations, or match those of colleagues in other universities. When expectations and reality don't match, then students do have a range of options which they should consider exercising in terms of either improving their lot or the lot of those who follow in their footsteps.

Unlike secondary schools, universities do not have the equivalent of a "parents group" which represents independently the views of a people whose only vested interest is in the education of their children. In universities, the various governing and managing bodies all have vested interests external to the educational process – whether these interests be personal careers, political biases, etc. It is therefore incumbent upon the students themselves to act as the independent voice that brings about changes when shortcomings are uncovered.

As with other forms of complaint and redress, the best place to start is closest to the source of the problem – in the case of university students, for small problems this can be through tutors; lecturers; heads of department; deans, and so on. Universities generally also undertake subject and course exit surveys to determine whether or not these are serving student requirements or delivering the required outcomes – these provide one useful forum for feedback, but there are others.

In looking at the sorts of problems that are faced at university, it is important for students to first separate out their individual academic performance from the behaviour of the university or the

fees that it imposes. Universities are obliged to maintain academic performance standards and, clearly, from time to time, students need to accept that they haven't performed as well as they could, for a number of reasons. If those reasons relate to the way in which the university has delivered or resourced the course; the quality of lecturing, and so on, then students have a legitimate reason to voice their concerns. On the other hand, the fact that students have paid fees for a course does not entitle them to an easy journey or a guaranteed degree – sometimes, academics have an important role in challenging students and taking them outside of their comfort zones as part of the learning process. Students also need to understand that one of the reasons they pay for a tertiary education is so that when they receive a degree, it represents a standard, and a level of quality that the students have attained – this would be rendered completely worthless if all students were either passed or given high grades when they had not achieved that standard. So, in trying to improve the system as a whole, students need to consider whether their issues are personal or caused by the system before they look at getting some form of redress.

In seeking redress, students also need to understand the limitations of those from whom redress is being sought. The larger and more systemic the problems, the further up the ladder they need to be referred. If, for example, it becomes clear that a program is run in a substandard building which needs to be upgraded, then clearly this is a matter that needs to be referred, at the very least, to the university chancellery and not to a young demonstrator, tutor or lecturer who has neither budget nor authority.

When problems are not addressed at university level, students need to exercise their rights and influence as would any other members of the public. Many students are intimidated at the concept of writing directly to a federal or state minister but they needn't be. In the first place, ministers for education have a responsibility to listen to stakeholders; take their concerns into consideration, and act on them professionally as they see fit. In the second place, when ministers receive numerous, similar complaints they are able to investigate patterns of behaviour which can be corrected by changes to government policy or departmental procedures. So, formal complaints can help reshape the future of the university system and they are important.

It may also be that students do not actually have a complaint about a particular university but, rather, an idea for how the operation of the university can be improved through changes to government policy. Again, there is merit in students writing directly to the relevant minister, whose staff will ensure the correspondence is acknowledged and considered appropriately. A reticence of students to directly contact ministers will almost certainly ensure a lack of government willingness to change the system, regardless of which party is in power – indifference from students can lead to indifference from governments because the message doesn't get through that change is required.

A good means of voicing concerns or ideas for improvement of the university system is through local members of parliament. A local member can take even a verbal complaint or idea and forward

it on to the relevant minister in order to get a reply. Sometimes this has more influence than a letter sent directly to a minister.

As can be gleaned from the content of this chapter, when it comes to universities and regulation, there is a very real issue as to which level of government to address concerns. In general, when it comes to the sorts of problems faced by students in terms of university teaching performance, facilities, supporting services and amenities, etc., the appropriate forum is through the Federal Government – either by direct correspondence with the Minister for Education or indirectly through contact with a local member of parliament.

In some cases, students may face issues that relate to the statutes and procedures employed within a university – this is a far less likely scenario but may occur if students, say, are dissatisfied with a result, or with the fairness of the system, and have exhausted all internal means of getting the issue resolved. In these instances, it would be sensible to correspond with the relevant state minister for education.

Generally, each state also has a State Ombudsman and a Federal Ombudsman whose role is to ensure that the relevant government agencies are behaving in a proper and fair manner with respect to stakeholders. There may be instances where students have serious concerns about irregular or unethical practices within the university that need to be addressed independently of the internal university mechanisms. In these cases, students can refer the matter to the State Ombudsman if their university is founded under a state

Act of Parliament, or the Federal Ombudsman if their university is founded under a Federal Act of Parliament.

Notwithstanding the fact that, from time to time, students do have complaints and difficulties with the Australian university system, the message and the experience, overall, for students in Australian universities is a positive one. The nation's universities have a credible reputation in the international university world, and the majority of those who participate in the system are satisfied with the outcomes that it delivers. Most students value their experience at university, and the colleagues and friends that they gain as a result of the overall experience. Ultimately, university study and learning are a combination of formal education and, just as importantly, personal interaction with peers.

The challenge for those entering the system is to never accept that it is as good as it can be – and to work hard to make the system better, through active participation not just in learning but also in generating ideas for how the system should change and adapt, and how problems can be resolved.