

# Priorities in Higher Education Reform

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## Case for Reform

Arguments for the reform of higher education arrangements in Australia stem from three sets of issues:

- the adequacy of the resourcing of the universities and the impact of resourcing on quality;
- the way the priorities of the universities are determined and the impact of the priorities on the purposes of universities and their *raison d'être*;
- the methodologies employed in the application of public policy for higher education and in managing the institutions.

## **Resources**

Few would dispute the inadequacy of the resources currently available for the teaching of Australian undergraduates. This is most graphically illustrated by the greatly worsening student/staff ratios. Ratios of about 12:1 were the norm in the 1970s and 1980s. By 1995 these had deteriorated by 20 per cent to about 15:1. They subsequently worsened by another 20 per cent and currently stand at about 19:1. Some of this decline may reflect improvements in efficiency and enhanced IT applications but few would dispute that the quality of the undergraduate experience in Australian universities has greatly deteriorated: staff/student contact has been reduced and classes are too large; there is insufficient time available for staff to prepare for teaching and for scholarship and research; and salaries and working conditions are making it difficult to attract and retain high quality staff. Indeed, the unsatisfactory state of university funding and its impact on the quality of staff and graduates was explicitly recognized by the former Commonwealth Minister for Education, Training and Youth Affairs in his leaked cabinet submission in 1999.

The main cause of the worsening situation since 1995 has been the cessation of the full supplementation of Commonwealth grants for salary increases and its replacement by

movements in the Safety Net Adjustment of the Australian Industrial Commission. Enterprise bargaining, which needs to take account of relevant salary movements in Australia and overseas, has resulted in a gap in operating grants of around one-eighth by 2001.

This gap will inevitably grow as new rounds of enterprise bargaining take place every three years or so. In brief, the last six years have seen an institutionalization of a resources gap that will grow year by year.

Another factor contributing to resource shortage has been the Commonwealth's decision to fund undergraduate enrolments in excess of planned numbers at marginal rates well below average costs. Universities have been tempted to over-enroll as a means of securing some additional funds towards salary increases, even though this inevitably has worsened resourcing per student. Some universities are now cutting intakes in an attempt to restore earlier per capita resource levels.

In spite of operating grants which have deteriorated markedly in terms of their purchasing power over academic resources, the total revenues of the universities have risen considerably in recent years. These increases have flowed from overseas student fees, graduate course fees, commercial operations, consultancies and research grants. However, these revenues are in practice almost wholly absorbed by the costs of providing the services they require. They cannot contribute significantly to the teaching of Australian undergraduates which remains virtually wholly dependent on Commonwealth grants and on the level of HECS contributions determined by the Commonwealth.

### **Priorities**

Currently, the determination of priorities for universities is highly centralized with a concentration of authority over the system in the hands of a government department under a Commonwealth Minister. A flavour of centralized planning imbues current higher education policy (and, indeed, research policy), reflecting a "big brother knows best" philosophy. This is in contrast to the emphasis that the Commonwealth has given to free markets and privatisation in the economic world.

In the last ten years or so prominence has been given to the pursuit of national objectives laid down by the Commonwealth. But national objectives can seldom be precisely defined and in a free society are subject to controversy and change and reflect political proclivities. As far as universities are concerned, they have to prepare students for life in a world the characteristics of which are necessarily imperfectly foreseen and much of the research they need to undertake may produce quite unpredictable results. A university that geared its activities to known requirements could hardly provide an education or conduct research to meet as yet unknown problems. The case for a plurality of priorities among universities is at least as strong as that against centralized planning in the economic sphere: each university ought to determine its own priorities in the light of its circumstances, priorities expressed by governments, and its assessment of current and future environments.

Moreover, the independence of the universities from direct government control or influence, i.e. institutional autonomy, is a pillar of a truly democratic society. Without such independence the university cannot fulfil its *raison d'être*: the unfettered pursuit of knowledge and its conservation and transmission; nor can it be the critic and conscience of society. Universities should operate at arms length from government and their dealings with government need to be mediated through bodies not directly subject to political processes. This approach was strictly adhered from the time of the Menzies involvement with universities in the late 1950s until the Dawkins interventions in the late 1980s.

## **Methodologies**

Over the past ten years or so new methodologies have been developed for higher education public policy and for managing the institutions. These have been reflected in the responses that the Commonwealth has required from the universities. They have seldom been challenged or objectively analyzed.

Consider the following examples:

- Since 1988 there has been considerable growth in university enrolments. Growth has been considered good in itself and all universities have aimed to become bigger. Should this continue without limit? What is the trade off between numbers of students and resources available per student? Is there a trade-off between numbers and quality of education? Is there a trade-off between numbers and standards of

entering students, between numbers of students and standards of courses offered? Should not the size of the higher education system to be supported by government funding be the result of a deliberate decision following objective analysis which takes account of level of access, standards of entry, the resources available, student demand and the social and private benefits of other forms of post-school education and training?

- Universities are in the business of providing personal services just as are health providers and schools. Is it possible to maintain or improve such services without real unit costs increasing in the long-term?
- What is the nature of “quality” in universities? Should the quality of inputs and processes be judged separately from the quality of outcomes? What are the outcomes whose “quality” is relevant? How can quality in university outcomes be assessed? Is there a distinction between the nature of quality in university outcomes and the nature of quality in markets for ordinary goods and services? Are quality assurance procedures cost-effective or are there better ways of securing quality outcomes of universities (e.g. peer review)?
- Are rates for completing degrees acceptable? Should the universities be responsible for ensuring high rates of completion or to what extent is that the responsibility of students?
- How applicable are commercial management tools to university management? Or are universities *sui generis* and require different management arrangements? To what extent is the context of private profit-seeking business relevant to universities? Do universities have a bottom line?
- To what extent is an emphasis on commercialization in universities consistent with their central mission? Are there limits that should be imposed?
- What are the advantages and disadvantages of the use of formulae for funding purposes? Especially, zero-sum funding formulae?
- What are the advantages and disadvantages of the Commonwealth’s using earmarked grants to achieve specific purposes?
- What is the appropriate balance between the provision of higher education and that of vocational education and training in Australia? And what should be the relationship between them?
- What should be the relationship between liberal arts/sciences education and professional training in universities?

Without serious analysis of these questions, how can we know whether the new management methodologies are enhancing or threatening the future effectiveness of our universities?

### **Proposed Reforms**

About a year ago I wrote a paper in which I proposed a number of reforms in the way higher education is administered in Australia. The reforms were designed to address the issues raised above. They involved:

- the reform of government / institution relations by the establishment of an independent body to advise the Commonwealth on higher education and to act as an intermediary between the Commonwealth and the universities;
- the decentralization of the funding of undergraduate teaching and research training;
- measures relating to research infrastructure funding to achieve some concentration of resources, discipline by discipline, for advanced teaching, research training and research.

The reforms are set out in detail in the paper attached. In addition I suggested new arrangements to take account of movements in the cost of the resources that universities employ.

The reforms were presented as a package, but the package was not intended to be on an all or nothing basis. While piecemeal reforms are not ideal, reform could be staged along the following lines.

### **Cost supplementation**

Most urgent is the need to rectify current cost supplementation arrangements. Currently Commonwealth operating grants are adjusted by a Cost Adjustment Factor made up, to the extent of 75 per cent, of the Safety Net Adjustment as determined by the Australian Industrial Relations Commission, and, to the extent of 25 per cent, of the Treasury Measure of Underlying Inflation (i.e. Consumer Price Index with seasonal and policy factors removed).

For the future, the first component of the Cost Adjustment Factor should be replaced by movements in component indexes of the Wage Cost Index compiled by the Australian Bureau of Statistics. Indexes relating to professional occupations and the educational

industry would be appropriate. This is not a suggestion to underwrite the enterprise agreements into which universities enter with their staffs, but rather to use a more realistic indicator of the costs universities face in purchasing their human resources. The universities will still have the incentive to drive a hard bargain as the supplementation they receive will not be affected by any particular enterprise agreement.

The newly defined Cost Adjustment Factor should apply to all Commonwealth subsidies and payments to universities, as well as to the financial parameters of the HECS arrangements.

Marginal funding for over-enrolments should be dropped. Universities should not be encouraged to over enrol while they are demonstrably underfunded.

The above reform will not restore resources to the levels of earlier years, but it will prevent the situation worsening. It is of very high priority that a move be made in this direction. The restoration of resourcing to earlier levels is an important but separate issue. It should not be allowed to stand in the way of fundamental reforms of higher education arrangements. I shall return to it at the end of the paper.

### **Government / Institute Relations**

An independent statutory body standing between the universities and the Commonwealth should be established. Its main responsibilities should be:

- to advise the Commonwealth publicly on higher education matters;
- to report publicly, say triennially, on the state of higher education in Australia;
- to administer Commonwealth programs relating to universities (other than competitive research funding schemes).

The members of the statutory body should be persons of high standing with appropriate backgrounds. They should not include senior university executives. The membership arrangements need to guard against capture by interest groups. The body should have responsibility for administering Commonwealth higher education programs. Experience has shown that the new body would be able to address objectively issues of the kind referred to above, especially those relating to student numbers, standards, quality, university management. Moreover, the existence of a buffer body between the institutions and the Commonwealth would greatly reduce political pressures on the universities and protect the Commonwealth from self-interested lobbying by individual institutions and state

governments and regions. It would facilitate a shift away from a conformity of universities to centrally specified objectives and behaviour to a pluralistic approach.

### **Funding Undergraduate Courses**

The Commonwealth should move to the funding of undergraduate courses for Australian students through the students rather than by way of direct government grants to institutions.

At current levels of student participation and government funding this could be achieved by awarding annually some 120,000 scholarships to students commencing university for the first time, carrying subsidies averaging about \$6,500 per annum. The subsidies would need to vary according to the cost level of the student's enrolment. The universities would determine charges on top of the subsidies and payable by students up-front or through HECS arrangements as at present organized. The scholarships would run for, say, five years equivalent full-time study.

The 120,000 scholarships should be divided into three tranches. About 80,000 should be awarded by nation-wide competition on the basis of tertiary entrance scores, about 30,000 should be for mature age entry on the basis of a tertiary admissions test (the current Special Tertiary Admissions Test administered by the Australian Council for Educational Research would be appropriate) and the remaining 10,000 should be allocated to institutions for special entries to be awarded at the institutions' discretion. Further details of the proposed reform are set out in the attached paper.

Those arrangements would have many advantages. Decisions on numbers of students and charges would be decentralized and would lie with the individual universities rather than being laid down by a central planning authority, itself subject to political / electoral pressures. The allocation of student places would be determined by a combination of education testing and student choice. Competition among institutions would be encouraged and the provision of educational services would become more sensitive to student requirements. The universities' independence would be enhanced. They would gain a measure of control over their revenues for undergraduate teaching – an essential requirement in an environment of enterprise bargaining. They would be able to determine their own priorities subject to market constraints. Diversity in course offerings, teaching methods and student services would be promoted. The universities would no longer be subject to bureaucratic interventions or to pressures to conform to

particular managerial practices. Given appropriate reporting and auditing, the Commonwealth need no longer be directly involved with the institutions so there would be economies in public administration.

From time to time the Commonwealth would need to adjust the number of scholarships and the value of the scholarships. In certain circumstances there might be a case for imposing broad upper limits on the universities' charges or on the number of undergraduates admitted by individual institutions, although it would be desirable for such constraints to be kept to a minimum. On all these matters the Commonwealth should act on the advice of the statutory body proposed above.

The above reform would not affect current arrangements for charging fees to overseas students or to Australian students undertaking graduate course work. However, with universities having the power to fix HECS charges, there would be little point in continuing the current arrangements through which some universities admit Australian students on a full fee basis. An essential element in the reform would be the maintenance of the current HECS arrangements for the payment of student charges. Those arrangements ensure equitable access to university education for students whatever their socio-economic status.

### **Funding Research Training**

The Commonwealth is currently separating the funding of research training from the operating grants of the universities. Approximately 21,500 research training places are to be allocated to universities by a formula based on their research degree completions, their publications and the research funds they attract. Each place will bring with it funding for up to four years at an average rate of about \$23,000 per annum. In these circumstances, universities will be anxious to maximize their share of places, irrespective of their capacity to undertake research training in particular disciplines. Moreover, the formula makes no allowance for the quality of universities' research activities. Ideally, research training in particular disciplines ought to be concentrated in those locations in which there are appropriate physical infrastructure, library and IT facilities and sufficient senior staff of proven research capacity. This would be facilitated by an allocation of research funds sensitive to research quality rather than solely in response to mere activity (see below). It would also be facilitated by allocating research training places to individuals

competitively rather than to institutions by a formula, and by encouraging students to study at the institutions most appropriate to their interests.

The current level of funded research training places would require the annual offer of some 6,000 research training scholarships, carrying subsidies to universities at current levels. Candidates would apply through the university of their undergraduate degree or through a university willing to give them status. The universities would place their candidates in an order of merit. The ranking would be calibrated by an appropriate objective test to obtain a national ranking of candidates. Students should be encouraged, by scholarship incentives, to undertake their research training at institutions other than their undergraduate university and at those institutions recognized as having specialized research training facilities for the particular discipline.

### **Funding Research**

The provision of block funding for research is essential to provide physical infrastructure, a staff base on which research activity can be built and a capacity to undertake long-term fundamental research unlikely to attract project funding. The current arrangements involve the allocation of institutional research grants on the bases of a weighted formula covering the research income they attract, research student enrolments and research publications. The formula gives no weight to quality considerations.

Australia should move to an assessment of research strengths in universities along the lines of the Research Assessment Exercise which has been conducted in the United Kingdom for the past 15 years. The research activities of the universities would be classified on a discipline basis into units of assessment. Every so many years a peer review evaluation would take place and the units of assessment evaluated on, say, a five-point quality scale. An institution's research grant would be calculated in relation to numbers of active research staff and research costs in each assessed discipline weighted by the relevant quality index. Once the aggregate grant for a particular university was determined, its allocation within the institution would be at the university's discretion. Arrangements such as these would give appropriate weight to the quality of the work done by researchers and groups of researchers and would ensure the concentration of resources, on a discipline basis, where they are most likely to be productive. Such an arrangement would make a more effective use of resources than the present one.

Research training should also be influenced by quality tests so that it becomes concentrated among the more highly ranked research groups. There might also be some concentration of honours teaching. It is important to stress that this proposal for concentration of research, research training and advanced teaching is being suggested on a disciplinary and not on an institutional basis.

### **Correcting Funding Erosion**

None of the above reforms will offset the erosion in real terms of operating grants (including HECS payments) that has taken place, especially since 1995. However the first of my reform proposals should prevent the erosion from steadily worsening.

To make good the decline in operating grants per student in terms of their purchasing power over staff and other goods and services would require an increase of the order of one-eighth in government subsidies and student charges. A strong case can be made for such an increase, although realistically it would need to be spread over, say, three to five years.

It should, however, be emphasized that concern about this issue should not be allowed to delay consideration and implementation of the structural reforms that I have proposed. Whether or not catch-up funding is available, the reforms should go ahead.

There is also the question as to whether catch-up funding should be applied proportionately across the board or whether it might be directed differentially to give special support to particular disciplines or to support centres of excellence in particular disciplines (including the fostering of high level honours courses). These issues require objective investigation – a task that might be taken up by the proposed statutory body.

### **Conclusion**

Although the Australian universities have been subject to the centralized imposition of Commonwealth priorities since 1988, they have in some respects moved towards a more market oriented provision of higher education services: the payment of full fees by overseas students and by graduate course work students, and the introduction of the HECS arrangements are clear steps in this direction. The reforms that I have suggested for the funding of Australian undergraduates and of research training would complete this trend towards a competitive market for university teaching services.

Competitive markets bring with them efficiency and effectiveness benefits. However, the case for the reforms I have been advocating does not rest solely or even mainly on the virtues of market competition. I am more concerned with ensuring the independence of the universities and the pursuit of excellence. I believe that these truly serve the long-term interests of a democratic nation, as would the diversification of the universities and the development of specialized high level centers of advanced teaching and research. I am sceptical of so-called national objectives and priorities, often with ideological and political undertones and based on uncertain premises.

As far as the merits of the market are concerned it should be remembered that students are not and cannot be well informed consumers in the same way as those who are operating in the market for detergent or automobiles or other ordinary goods and services. Ordinary goods and services have characteristics that are more or less well known. But the benefits to be rendered by a university course cannot be known with any precision by the intending student, particularly as they accrue over a life time, nor can there be any symmetry in knowledge between student and academic. Also, in any given locality there are necessarily relatively few university suppliers and certainly not a perfectly competitive market. Thus the optimum properties of competitive markets cannot be expected to hold in the market for educational services. Moreover universities, as non-profit and publicly assisted bodies, must respond to public interest considerations; for example, in the maintenance of scholarship and research in basic disciplines or in areas of national concern, even if student demand in these areas is low. The proposed statutory body would be in a position to influence the institutions in such matters.

The present arrangements for higher education in Australia are not sustainable in the long run. They presage a decline to a uniform mediocrity. Reforms of the kind outlined above are not based on any particular ideology. But they are what is needed for Australia in the twenty-first century.

**ATTACHMENT to paper on**  
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The Melbourne Institute  
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## **Public Policy and Higher Education**

**The Joseph Fisher Lecture in Commerce**

**University of Adelaide**

**30 April 2001**

**Peter Karmel**

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## **PUBLIC POLICY AND HIGHER EDUCATION**

**Joseph Fisher Lecture in Commerce, 30 April 2001  
University of Adelaide**

**Peter Karmel\***

The invitation to deliver the Joseph Fisher Lecture this year has given me great pleasure not only because of the honour of the invitation itself but because of my close association with the University of Adelaide during the 1950s and 1960s. I well remember the first Joseph Fisher Lecture in which I was involved. It was in 1952 and the lecturer was J. G. Crawford speaking on “Australian Agricultural Policy”. In those days the lecture was held at night in the Bonython Hall and the platform party wore black ties. The official party arrived on the platform at 8.00 pm to discover a virtually empty hall – the University authorities had neglected to advertise the event! Embarrassed, the 15 or 20 persons present adjourned to the Staff Club where Jack Crawford conducted an informal but well informed seminar. I hope that we will do better this evening!

### **PURPOSES OF HIGHER EDUCATION**

The main purposes of universities have recently been described in a report of the Commonwealth Minister for Education, Training and Youth Affairs (Kemp, December 2000) as:

- to inspire and enable individuals to develop their capabilities to the highest potential throughout their lives (for personal growth and fulfilment, for effective participation in the workforce and for constructive contributions to society);
- to advance knowledge and understanding;
- to aid the application of knowledge and understanding to the benefit of the economy and the society;
- to enable individuals to adapt and learn, consistent with the needs of an adaptable knowledge-based economy at local, regional and national levels; and

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\* I wish to acknowledge the help of Mr R. H. Arthur in the development of the ideas set out in this paper and his assistance in spelling out details.

- to enable individuals to contribute to a democratic, civilised society and promote the tolerance and debate that underpins it.

Few would disagree with this list, although the manner in which a particular institution pursues these purposes depends on the priorities or weights it attaches to them.

Most would also agree that public policy relating to higher education should aim at facilitating these purposes by:

- promoting access to higher education;
- pursuing excellence in the work of students and in the scholarship and research of academic staff;
- providing an environment to enable universities to fulfil their purposes.

My purpose in this paper is to discuss the implications of the current arrangements for policy setting and management of our university system, in particular government/institution relations and funding mechanisms. These unquestionably impinge on the universities' capacity to fulfil their purposes and on the efficacy of public policy in meeting its objectives.

There is general agreement that our universities are in need of a substantial financial boost. (This has been recognised by the Commonwealth Government in the leaked 1999 Cabinet Submission and by the Opposition in its statements on the *Knowledge Nation*.) But the arguments for reform that I shall advance are deeper and the longer-term consequences of inaction more serious than simply a claim for more money. At stake is the nature and quality of our universities, their independence, their international competitiveness and their capacity to serve Australia in the 21<sup>st</sup> century.

The last decade has seen significant changes in the relationship between universities and government. While some have been clearly beneficial (for example, the Higher Education Contribution Scheme (HECS)) the trend has been towards an increasing level of government and bureaucratic involvement with, and influence over, the way our universities function. Unless significant changes are made in the way governments

interact with universities, the principles of institutional autonomy and academic independence will cease to have any real meaning, public higher education policy will falter and our universities will fail to meet our expectations.

### **CENTRALISATION versus DECENTRALISATION**

The present government involvement in the administration of higher education in Australia is highly centralised with a concentration of authority over the system in the hands of a government department under a Commonwealth Minister. The degree to which the system of higher education is currently subject to a single point of view is well illustrated by a reading of the Commonwealth Minister's current report on Higher Education for the 2001 to 2003 Triennium (Kemp, December 2000). The document is not a report on the state of the universities but rather a specification of plans (resources and student numbers) for individual institutions and a declaration of policies for universities including a range of requirements that are to be met. There is no analysis of student demand, quality of intakes, adequacy of resourcing, staff numbers and quality, or quality of outcomes. Nor is there any discussion of options or trade-offs between numbers of students, quality and resources.

The flavour of centralised planning that imbues current higher education policy is in contrast to the emphasis currently being given to open and free markets in the economic world. In the economic world, centralised planning has seldom proved successful: decentralised markets are a much more effective mechanism for producing and distributing goods and services. The presumptions favouring a more decentralised system of universities are powerful.

The highly centralised perspective of higher education policy places emphasis on the pursuit of national objectives laid down by the Commonwealth Government. But in a free society national objectives are often imprecisely defined and are subject to controversy and change. Universities must prepare students for life in a world the characteristics of which are necessarily imperfectly foreseen. A university that geared its activities to known requirements could hardly provide an education or conduct research appropriate to meet as yet unknown problems. Moreover, one of the roles of a

university in a free society is to be the conscience and critic of that society; such a role cannot be fulfilled if the university is expected to be an arm of government policy. There is thus a strong case for a plurality of priorities among universities whereby each institution determines its own priorities in the light of its circumstances and its assessment of the current and future environment.

The independence of the universities from direct government control or influence, i.e. institutional autonomy, is one pillar of a truly democratic society. Institutional autonomy is a necessary, if not a sufficient, condition for academic freedom – itself an essential element of the kind of society in which we live. The universities are among those institutions that should operate at arm's-length from government if they are properly to fulfil their role. In this they are not dissimilar to institutions such as the Reserve Bank, the Australian Broadcasting Corporation and other independent statutory bodies. Indeed, from 1959 when the Australian Universities Commission (AUC) commenced operations until 1987 when the Commonwealth Tertiary Education Commission (CTEC) was abolished the universities were largely, if not entirely, insulated from political pressures and their autonomy protected to a significantly greater degree than has recently been the case. This is not widely appreciated, either within or beyond the universities.

Decisions on public policy relating to higher education need to be informed by objective analysis unaffected by political/electoral considerations. The Commonwealth is unlikely to receive advice of this kind from a government department subject to ministerial direction and the lobbying of individual institutions. Above all, the advice should be based on sound knowledge and an understanding of how universities operate and their role in society.

The standard of public debate on higher education in terms both of knowledge of facts and sophistication of argument reflects a serious deficiency in our capacity for objective analysis. This is well illustrated by several policy proposals that have recently emerged. The first example is the proposal for a large-scale on-line university – a proposal made apparently without detailed consideration of the extensive involvement of some existing universities with distance education, including on-line delivery, and the not very

encouraging experience of the Open Learning Agency. Another is the suggestion that regional universities (somewhat eccentrically defined) should receive special support for the enrolment of research students (Aitkin, 2001) without regard to any rationale relating to research training itself. A third example is the Commonwealth proposal to create more science places, apparently without considering whether the putative shortfall of science graduates is due to a lack of places or a lack of appropriately qualified students.

For these reasons, and to enable the universities better to achieve their purposes, I am advocating:

- the establishment of an independent body to monitor higher education in Australia, to advise the Commonwealth Government through objective analysis of higher education issues and to act as an intermediary between the government and the institutions; and
- the decentralisation of the funding of teaching within universities.

Furthermore, the highest levels of scholarship, research and research training need to be concentrated, for any given discipline, in a limited number of locations in order to provide a critical mass of inputs and achieve excellence in outcomes. The alternative is for these activities to be a by-product of undergraduate student numbers, since these determine staff numbers in the individual institutions. This would hardly be a rational way of allocating scarce research resources. Consequently I am also advocating:

- some concentration of resources, in each discipline, for advanced teaching, scholarship and research.

## **ISSUES**

Before proceeding with details of these reforms, I want to examine a number of issues arising from current policies and practices. They illustrate how higher education policy has evolved in recent years with little critical and objective analysis of its implications and without a proper regard for its consequences. They underline the need for reform. I shall discuss them under four headings:

- student numbers;
- resources;
- quality;
- management.

## Student Numbers

Over the past decade university enrolments have shown considerable growth, increasing by almost 60 per cent. (Over the longer run, the expansion of Australian university education has been truly remarkable – when I was an undergraduate in 1940 there were only about 14,000 students in the whole country, and when I came to Adelaide in 1950 there were under 31,000: now the figure is close to 700,000 – a 50-fold increase over my working life during which time the Australian population has multiplied 2½ fold).

### All Students – Australian Universities

	1989	2000	Increase
	000	000	per cent
Non-overseas			
Research	12	33	171
Graduate Course Work	53	91	74
Undergraduate	355	476	34
Overseas	21	96	353
Total	441	695	58

Source: Department of Education, Training and Youth Affairs (DETYA), *Selected Higher Education Statistics*

The increased participation in higher education is partly a reflection of a lengthening of the time people spend enrolled as students: research and graduate course work enrolments have increased much more than undergraduate enrolments and double degrees have become common. Thus while enrolment figures reflect the increased *participation* of the Australian population in higher education, they do not give a precise indication of *access* to higher education.

Access is measured in terms of numbers of students enrolling in higher education for the first time. If the numbers of first time commencers are related to the size of the relevant age groups, the lifetime probability of a person enrolling in higher education can be calculated. Thus, on the basis of current experience, some 47 per cent of an age cohort will enrol in a university either on leaving school or shortly after or at some later stage in their lives. (Incidentally, there is a marked gender differential: the probabilities being 40 per cent for men and 55 per cent for women).

	<b>First-time Commencing Non-overseas students</b>	<b>Probability of Enrolling in Higher Education</b>
	000	per cent
<b>1989</b>	103	37
<b>1995</b>	124	46
<b>2000</b>	127	47

Source: DETYA data base and author's calculations

The figure of 47 per cent indicates a high level of access to higher education in Australia. It is high absolutely and relative to comparable countries. The overall figure does, of course, conceal some differential access, particularly in relation to socio-economic status and to the situation of indigenous Australians.

Moreover the figure of 47 per cent should be considered in the context of access to all tertiary education, i.e. to vocational education and training as well as to higher education. When access to vocational education and training is added to access to higher education, and double counting is eliminated, the life time probability of accessing tertiary education comes out close to 90 per cent (Aungles, Karmel and Wu, 2000). This must be near to saturation. Of course, for a given level of access, participation in tertiary education may still increase if students take longer courses or more courses or endure more failures.

Over the past ten years or so policies have promoted access and the growth of the higher education system, but there has been virtually no discussion as to what an appropriate level of access or size of the system might be. The fact is that trade-offs between student

numbers and entry standards, and between student numbers and the resources available for teaching each student, have been ignored.

An examination of tertiary entrance scores reveals that some universities have relatively low entry standards. This can be illustrated by analyzing the tertiary entry scores in 2000 for the eighteen campuses located in New South Wales. Most universities admit some students with very low scores, probably because of special circumstances. To eliminate these the Universities Admissions Index (UAI) rank at the ninth decile for each campus has been calculated. These indicate the index above which 90 per cent of those newly enrolled in 2000 ranked. It can be seen that these vary between 75.2 and 46.4 – a wide disparity in standards of entry. The overall State average is 64.0.

**New to Higher Education Enrolments  
Universities Admission Index  
New South Wales 2000**

<b>Campus</b>	<b>Ninth Decile</b>	<b>Campus</b>	<b>Ninth Decile</b>
A	75.1	J	55.8
B	62.5	K	53.3
C	70.7	L	54.7
D	52.9	M	75.5
E	61.0	N	67.0
F	55.6	O	75.2
G	74.3	P	70.2
H	54.4	Q	67.8
I	46.4	R	47.1
All Campuses: 64.0			

Source: New South Wales Admissions Centre data base and author's calculations

Entry standards are inversely related to numbers of enrolments. Enrolments are largely determined by the number that the Commonwealth is willing to fund – a number fixed apparently without regard to standards – and by the desire of institutions to grow. Thus standards are determined by the number of students universities manage to enrol, and by the general view that the more students the better, rather than the number being the result of standards set by the institutions. If entry standards become too low the quality of work that can be expected of students will fall and degree standards decline. This is not to say that

some variation in entry standards might not be desirable or that less demanding courses do not have a place, but decisions in relation to standards ought to be made deliberately.

Over the past decade, with enrolments expanding faster than funding, the resources available per student for teaching have declined. As a result the quality of the university experience offered to students has deteriorated, also compromising standards.

The size of the higher education system to be supported by government funding should be the result of a deliberate decision taken after an objective analysis which considers the interrelationships among the level of access, the standards of entry, the resources (cost) per student, student demand and the accessibility of other forms of post-school education and training. This has not happened over the past twelve years or so.

## **Resources**

Over the past twenty years public funding for higher education institutions has not risen as rapidly as enrolments. This reflects the Commonwealth Government's view that the institutions should improve their efficiency so that the burden imposed by the universities on Commonwealth finances can be reduced.

In 1989 the Commonwealth Government transferred some of the public funding burden to students, requiring them to contribute a portion of the cost of their courses either up-front or through income contingent loans. In 1996 the Commonwealth raised the charges under HECS and differentiated them among courses. Allowing for forgone interest and defaults, HECS charges are tending towards covering around 25 per cent of base operating grants.

Commonwealth outlays on higher education in real terms, net of HECS receipts, are now 5 per cent **lower** than they were in 1995 despite an increase of 10 per cent in non-overseas student load and an increase of 25 per cent in the size of the economy as measured by gross domestic product. Virtually the whole expansion of domestic enrolments since the early 1990s, as reflected in base operating grants, has been funded by a combination of students' contributions and increased teaching loads. Public funding of universities has been significantly compressed.

**Commonwealth Government Funding for Higher Education  
in Year 2001 Prices <sup>(a)</sup>**

	<b>1988</b>	<b>1993</b>	<b>1995</b>	<b>2000</b>
	\$m	\$m	\$m	\$m
Base Operating Grants(b)	3,624	4,294	4,763	4,886
HECS Receipts	-	250	499	917
Base Operating Grants, Net of HECS	3,624	4,044	4,264	3,969
Other Commonwealth Funds	313	762	921	939
<b>Net Commonwealth Funding</b>	<b>3,937</b>	<b>4,806</b>	<b>5,185</b>	<b>4,908</b>

<sup>(a)</sup> current funding adjusted for cost increases by Commonwealth's cost adjustment factor;

<sup>(b)</sup> including HECS liabilities.

Source: AVCC: *Funding Tables*

The serious deficiency in funding that the universities have faced in the last five or six years is mainly the result of two factors: the introduction of enterprise bargaining into university industrial relations in 1993 in relation to which the Commonwealth no longer fully funds salary increases, and the Commonwealth decision in 1996 to reduce its funding of base operating grants by a total of 6 per cent over the years 1997-2000.

To maintain real funding per student at 1995 levels in the light of salary and other cost increases an increase in government base operating grants of around \$¾billion would be required. In the light of the decline in Commonwealth funding of universities that has taken place since the mid-1990s, such an increase would not in itself appear to be unduly burdensome for the Commonwealth.

Universities have responded to the above financial pressures by shedding staff and/or by enrolling additional students so as to attract marginal funding at rates well below the average cost of teaching students. Either way, academic staff /student ratios have grossly deteriorated.

### Student/Staff Ratios

1975	11.7
1980	11.7
1989	14.2
1995	15.0
2000	18.7

Source: TEC: *Report for 1982-84 Triennium*;  
DETYA: *Selected Higher Education Statistics*

During the 1970s the ratios were around 1 to 12. By 1989 they had fallen to 1 to 14 and by 1995 to 1 to 15. These declines were a response to pressures for improved efficiency and may have reflected an element of substitution of technology for face-to-face teaching. However by the year 2000, the institutions' reduced command over resources forced a further decline to 1 to 18.7 – a decline of over 20% in five years. As a result many classes are now far too large; staff/student contact has diminished; academic staff have inadequate time for preparation, study and their own scholarship and research; and morale is low. In the international market for top quality staff, salaries and working conditions are making the Australian universities increasingly unattractive.

During the 1970s and early 1980s considerable improvements were achieved in teacher/pupil ratios in schools. By and large, in spite of budgetary pressures, these improvements have been maintained through Commonwealth and State Government support for both government and non-government schools, with only a slight deterioration in government schools in some States. (Harrold, 2000). This is in striking contrast to the treatment accorded the Commonwealth funded higher education sector.

Decisions about the government's resourcing of the universities need to be made in the context of the consequences of these decisions in terms of student numbers and the quality of the work of the institutions. Again, objective analysis is essential.

The universities have been active, and in many cases very successful, in seeking alternative sources of revenue. However major elements of the revenue from new

### Universities Revenue by Source

	1981	1989	1998
	per cent	per cent	per cent
Commonwealth Government Grants	89	77	51
HECS	-	-	17
Fees and charges	-	6	16
Other	11	17	16
	100	100	100

Source: AVCC: *Key Statistics*

sources are dedicated to particular activities (especially research and consultancies), and fees from overseas students are largely absorbed by teaching those students. The fact is that the teaching of Australian undergraduates and the training of Australian research students has been and remains virtually 100 per cent dependent on the Commonwealth Government. It must be remembered that the Commonwealth determines the level of HECS payments for undergraduates just as it determines the level of its grants; thus, the universities remain almost 70 per cent dependent on the Commonwealth with its highly centralised mode of dealing with the institutions.

While there has clearly been a welcome diversification of the sources of university revenue, it should not be assumed that all diversification is desirable. As already pointed out, diversification may not produce resources which are available for discretionary use. Moreover the thrust towards the commercialization of university activities (especially research), apart from carrying high risks, raises the questions of whether commercialization is not a distraction from the universities' core business of teaching and research and whether the skills available in universities and the culture that imbues them are generally appropriate for commercial enterprises. Enthusiasm for commercialization should not lead us to assume that these are settled questions, however desirable commercial operations might be in particular instances. Again, objective analysis is needed.

## Quality

One of the positive consequences of the changes in higher education initiated by John Dawkins in 1987 (Dawkins, 1988) (I hasten to interpolate that there were a number of negative ones) was an increased emphasis on outcomes and a growing consciousness of the importance of institutional efficiency and effectiveness. Indeed, concerns about efficiency and effectiveness in education had surfaced earlier and reviews of school and higher education efficiency and effectiveness had been conducted in the mid-1980s (Karmel, 1985, Hudson, 1986), but within the universities serious attention to these matters did not surface until the 1990s.

The abolition of the binary divide in higher education in 1988, which resulted in a doubling of the number of universities, and the subsequent large increase in enrolments, stimulated concerns about the quality of the work of the universities and resulted in the establishment of the Committee for Quality Assurance in Higher Education (CQAHE). The Committee conducted inspections and published reports on the institutions in the three years 1993 to 1995. Universities were given gradings and rewards for good performance. The exercise involved elements of both quality assessment and quality assurance. To date there has been no attempt to assess its value or effectiveness.

Recently (March 2000) the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) endorsed the establishment of the Australian Universities Quality Agency (AUQA) as an independent body to conduct quality audits of higher education institutions on a five yearly basis. The emphasis is on the quality assurance processes employed by institutions and the audits will be conducted on a whole-of-institution basis (Kemp, 2000).

The issue of quality is bedevilled by the complexity of what is meant by “quality” in a university setting. Clearly, quality is multi-dimensional. For the range of courses offered by a university there are questions of quality in relation to course content, teaching, lecturers, graduate outcomes, the environment for students and so on. Quality of research activities or community services raises an equally large range of issues.

Discussions of quality in universities seldom specify quality characteristics in ways capable of precise definition or measurement. Moreover the benefits that a university education may be expected to confer on graduates (and which reflect the quality of that education) accrue not on graduation but over a lifetime and therefore are difficult to assess at any given point of time.

In the production and distribution of most goods and services in the market economy, quality is able to be more or less precisely defined and assessed. Mechanisms for quality control, quality assurance and quality improvement can be devised and applied in a relatively straight forward manner. This is not the case in the field of education and the application of techniques established for ordinary business purposes may be of little practical benefit and be wasteful of effort. This is not to say that concerns about quality are unimportant, but the special characteristics of educational and research processes need to be taken into account.

The conceptual difficulties in defining what is meant by quality in higher education and in assessing it have lead to an emphasis on quality assurance mechanisms. Indeed this was the emphasis of the CQAHE in 1993-95 and is the remit of the newly formed AUQA. There is a risk that quality assurance procedures will be set up in institutions which will absorb considerable resources and be little more than rituals pursued to conform with the requirements of bodies external to them. A “whole-of-institution” approach seems likely to reinforce this risk, since the heterogeneity of a university’s activities makes variability of quality within the institution probable. Moreover, the existence of quality assurance mechanism is relatively unimportant if quality outcomes are in fact being achieved; if they are not being achieved the existence of quality assurance rituals is no guarantee of quality improvement. In all considerations of quality in universities the fundamental role played by academic staff needs to be emphasized: the surest route to high quality outcomes is high quality staff.

The alternative approach to quality assurance reviews of whole institutions is peer review on a course or field of study basis; for example, a review every so many years of a given course or field of study across all institutions, involving quality assessment and an audit of processes to achieve quality improvement. Such reviews rely on the expertise of people with years of

experience in the activities that they are assessing. The Quality Assurance Agency for Higher Education in the United Kingdom appears to be operating along these lines (QAA, 2000). In fact discipline reviews of law, engineering, accounting, teacher education in mathematics and science, agriculture and computer science were conducted in the late 1980s through CTEC, with some positive results. The contrast between such an approach and that likely to be followed by the AUQA underlines the need for a capacity for objective analysis of policy options in this important area.

### **Management**

I shall refer to two separate aspects of management in universities: the first relates to the internal management arrangements of the institutions; the second to the influence exerted by current government policy on these arrangements.

I have already pointed out, in respect of quality issues, that the provision of education services is different from the ordinary business of supplying goods and services in the market place. Universities are not driven by the motive of maximising profits: there is no bottom line in the private enterprise sense. Instead there is a whole range of outputs – course offerings, graduations, research results, publications, community services – that cannot be added together to give a profit and loss statement or a balance sheet. Moreover the executive of a university cannot exercise the same degree of control over the operations of the institution as the executive of a corporation of comparable size, because “authority” in the university is necessarily disseminated among the professors who are the authorities in their own fields. In addition, universities, as currently operating, have only little control over the quantities of services they provide and the prices they charge for them. In brief, universities are *sui generis* and the application of management practices which work in private businesses will not necessarily work in them.

Many decisions within universities need to be made on a collegial basis – although the definition of the “college” is variable and is not necessarily inclusive – in particular, appointment of academic staff, admission of students, course structure, examining, research evaluation. However, there is no simple dichotomy between collegial and managerial styles of governance. The resources available to universities are limited; they have to be managed.

Decisions on their allocation need to be made strategically, and this may require executive action. In short, universities require a style of management that is, at least, consultative in process even if firm in final decision-making.

In recent years government policy has been not to attempt to micro-manage the universities but to induce universities to become more “business like” by requiring them to conform to certain practices and to pursue government priorities by offering inducements through special programs. These requirements and inducements have, in practice, resulted in considerable government intervention.

The former include the submission of quality assurance and improvement plans, guidelines for the preparation of annual financial reports, equity plans, capital management plans, research and research training plans, mission statements and strategic plans. These plans absorb considerable resources. They are usually of little operational use either within the institutions or for policy formulation. Their development seems little more than a ritual. Thus research plans have to be expressed in very general terms since a university’s research activities are so many and varied, developments are often quite unpredictable and progress serendipitous. The application of business techniques to universities may, in some cases, turn out to be counter-productive. This appears not to be understood by government authorities.

As far as special programs are concerned, the Minister’s recent report (Kemp, December 2000) lists 37 programs, projects and schemes which are managed by the Higher Education Division of DETYA. Many of these involve providing universities with grants earmarked for specific purposes. This procedure reduces the discretion universities can exercise in the allocation of their funds and their capacity to determine their own priorities. It reflects the interventionist flavour of government policy towards higher education over the last twelve years or so, during which additional funding has been provided only in ways circumscribed by the Commonwealth. This has been accepted by universities, apparently with little questioning.

A prime example of conditional funding is the Commonwealth’s funding for its Workplace Reform Program for universities, involving the payment of an additional 2 per cent of the

notional salary component of operating grants. Twenty one criteria have been laid down and universities are expected to conform to at least a number of these. Some of these criteria will significantly affect the detailed internal management arrangements of the institutions, and are highly interventionist.

Since universities have no bottom line by which to measure performance, government policy has supported DETYA in developing a range of performance indicators (a practice which has become common in many public sector operations). Performance indicators can provide useful information, but they need to be interpreted with caution. Some do little more than describe the characteristics of particular institutions (e.g. student numbers, range of courses); others are influenced by many independent variables which the indicator cannot take into account (e.g. pass rates, students' course experience questionnaires). Great care must be taken in comparing the performance of institutions or in constructing league tables. The precise meanings of indicators need explication. Objective analysis of performance indicators is essential if conclusions are to be drawn from them.

The Commonwealth Government in allocating funds has made a good deal of use of formulae. The distribution of operating grants has been based on a formula since the relative funding model was established in 1990. As a consequence of the White Paper on research funding (Kemp, 1999), the allocation of funding for research training, as well as the allocation of the research quantum (now institutional grants) and the research infra-structure block grants, is formula based. Many universities have themselves adopted the formulae (sometimes in a modified form) for internal allocation purposes – a practice which places internal allocation procedures in a straitjacket and greatly reduces managerial discretion in funding.

As far as allocation among institutions is concerned, the use of publicly known formulae almost always produces unintended, but perfectly predictable, consequences. Universities feel they have little choice but to play the formula, incentives are affected and undesirable consequences emerge (e.g. researchers may be encouraged to produce numbers of small, quick and superficial publications rather than a major piece of work, universities may engage in wasteful competition and misleading advertising to attract students, diversity among

institutions may be reduced as they attempt to profit from a common formula). On the whole publicly known and automatically applied formula funding ought to be avoided.

Universities have been under pressure for some time to improve efficiency. Productivity, as crudely measured, has certainly risen substantially over the past decade. Thus, course

<b>Productivity (???)</b>			
	<b>1989</b>	<b>1999</b>	<b>Increase</b>
Course Completions	90,477	164,423	82 per cent
Academic Staff (FTE)	24,919	29,748	19 per cent

Source: DETYA, *Selected Higher Education Statistics*

completions rose by over 80 per cent over the decade 1989-99, while full time equivalent academic staff rose by less than 20 per cent – a productivity increase (completions per academic worker) of over 50 per cent or 4 per cent per annum. Superficially this is a creditable performance. However, this is a quite misleading conclusion because the services rendered by academics to students, their research activities and their community services have almost certainly diminished. University staff are in the business of rendering personal services in much the same way as doctors, lawyers and other professionals. A greater throughput of clients inevitably affects the quality of the services rendered. Again, objective analysis of this and other management issues is needed.

## **REFORMING HIGHER EDUCATION**

The matters that I have just discussed illustrate the need for major reforms in the arrangements for higher education in this country as well as for additional public resources. Without these reforms and without additional resources, Australia's higher education system is likely to regress towards a uniform mediocrity. I now turn to the question of reform. I shall deal with it under four headings:

- government/institution relations;
- funding undergraduate courses;

- funding research training;
- funding research.

What follows is based on the proposals set out in some detail in my paper “Reforming Higher Education” recently published as an Occasional Paper by the Academy of Social Sciences in Australia (Karmel, 2000).

### **Government/Institution Relations**

An independent statutory body standing between the universities and the government, along the lines of the commissions which operated successfully from 1959 to 1987, should be established. The Australian Research Council (ARC) recently constituted as a statutory body with advisory, policy and operational responsibilities also provides an appropriate model.

The body should:

- advise the government publicly on all higher education matters;
- report publicly, say triennially, on the state of higher education in Australia;
- accredit institutions for eligibility to receive public funding for undergraduate higher education, subject to appropriate conditions;
- accredit institutions for eligibility to enrol holders of research training awards in particular disciplines;
- advise on the number and value of publicly funded undergraduate places and research training awards;
- advise on institutional research grants (research block funding);
- advise and report on quality assurance mechanisms both within and across institutions;
- administer programs arising from the foregoing.

The statutory body should have operational responsibilities, i.e. it should administer policies and programs and not be purely advisory. Limiting the responsibilities of such a body to offering advice and publishing reports is a recipe for irrelevance. This was clearly demonstrated in the case of the National Board of Employment, Education and Training and its Councils.

The statutory body should be chaired by a respected senior person with academic and management experience (of vice-chancellorial status or the equivalent) and include eight members: two academics, two practitioners of the professions, two business persons and two members from the wider community. The members should be persons of high standing, who are well informed on how universities work and what they do. The membership should not include current vice-chancellors or senior university executives. It should certainly not be representative: the arrangements need to guard against capture by interest groups.

The proposed body would be able to address objectively those issues, to which I have referred, relating to the size of the higher education sector, its resourcing, its quality and its management and provide the Commonwealth with advice on them, indicating the consequences of various courses of action. Such advice would be public and would lead to more transparent decision making. Moreover, the existence of a buffer body between the institutions and the government would greatly reduce, if not eliminate, political pressures on the institutions as well as protect the government from lobbying by the institutions. Universities would be freer to express their views on policy issues affecting them without the concern currently obtaining that they cannot afford to criticize or embarrass their paymaster. The low level and quality of the public debate on the issues that I have canvassed is proof enough of the reluctance of senior university officers to make statements for which their institutions might be disadvantaged.

### **Funding Undergraduate Courses**

The Commonwealth should move to the funding of undergraduate courses through students rather than through direct government grants to institutions. To achieve this, the Commonwealth should offer annually some 120,000 scholarships (almost the current number of first time commencing university students - I am assuming a slight tightening of standards). This number would support a university system of around the present scale – the number would need to be adjusted from time to time in relation to demographics and standards. A scholarship would entitle the winner to, say, up to five years of subsidised full

time equivalent undergraduate or coursework graduate education at a university to which he/she can gain entry. Enrolling a scholarship holder would entitle the university to an annual subsidy from the Commonwealth for the duration of the course. The subsidies would need to vary according to the cost level of the student's enrolment.

At present funding levels the subsidies would need to average around \$6,500 per annum. To the extent that the erosion of operating grants of the past five years is restored in real terms they would need to be higher. Universities would charge higher education contributions on top of the subsidies. On average they would need to be around \$4,000 per annum. Courses or course work extending beyond the five years of subsidised tuition would carry full fees.

Some institutions would compete for students by charging less; others might charge more to cover the cost of special services. Some might charge the same for all courses; others might take into account differential costs or the relative demand for courses. In order to allay fears of the charges being pushed too high, it might be necessary for the government to mandate an upper limit to the contributions.

Both the subsidies and the upper limits to the contributions would need to be indexed to take account of movements in the cost of the resources universities employ. The salaries component should be indexed by movements in average weekly earnings and the remainder, as at present, by the Consumer Price Index. It would be essential for the students' contributions to be subject to the present HECS arrangements.

The 120,000 scholarships should be divided into three tranches. About 80,000 should be allocated on the basis of students' tertiary entrance (TE) scores; State and Territory rankings would need to be converted to a national ranking, but there is a standard procedure for doing this. About 30,000 should be available for mature age entry. These could be allocated on the basis of candidates' results in the Special Tertiary Admissions Test (STAT) administered by the Australian Council for Educational Research (ACER) and already widely used for admitting mature age entrants. The remaining 10,000 scholarships should be allocated to institutions for special entries to be awarded at the institutions' discretion.

The 120,000 scholarships annually represent about 45 per cent of an age cohort. The number of scholarships, and hence the number of subsidised enrolments, would need to be determined by the Commonwealth Government from time to time after careful analysis, taking account of demographic factors, entry standards, student demand, workforce considerations, the availability of alternative vocational education and training opportunities, and costs. The analysis, and the public advice to the Commonwealth flowing from it, would be a major responsibility of the statutory body proposed earlier.

The suggested reform will meet opposition from staff and student bodies, partly because of objections to student charges on principle and partly because of fears that universities will push up charges. The former are countered by the continuation of the patently equitable HECS arrangements (and by a recognition that universities are, in any case socially selective and charging students a contribution serves to promote equity in the distribution of costs and benefits between those who do and those who do not receive a higher education); and the latter are countered by the previously suggested ceiling on student contributions.

The proposals will also be opposed by some universities because they fear that the stronger institutions will admit increasing numbers of students leaving them with too few. This is especially a fear of regional universities. In my view, these concerns are exaggerated. In the current active competition for students most regional universities experience strong demand. If anything the above arrangements should advantage them as they could compete by lowering their higher education contribution charges. However if necessary the Commonwealth could impose limits on the number of scholarships tenable at individual universities. Such a move should allay concerns. Alternatively, lump sum annual subsidies of, say, \$5m or \$10m might be paid to regional institutions.

The proposed reform has many advantages. Entry standards would be determined on educational grounds rather than in response to political, regional and institutional pressures as at present. The allocation of student places would be determined through a combination of education testing and student choice, thus avoiding arguments about States' shares of enrolments. Funding would be decentralized and political pressures and bureaucratic

intervention would be greatly reduced as would bilateral dealing between institutions and government officials. The grant assessment and profile negotiation functions of DETYA would no longer be required; the number of enrolments, subject to possible upper limits, would be a matter for each institution to determine. The universities' independence would be enhanced and they would become patently responsible for their own affairs. They could determine their own priorities, and diversity in course offerings, teaching methods and student services would be promoted. The Commonwealth Government would not be directly involved in assessing/monitoring the quality of institutions. There would be economies in public administration.

At the same time, the Commonwealth would be in a position to control its expenditure on higher education teaching through the quantum, value and length of tenure of scholarships and through the conditions under which HECS operates. The Commonwealth could still influence the development of higher education through the quantum of scholarships and their value, and through the provision of capital to establish and foster new institutions. The quantum of scholarships and entry standards would be clearly linked. Governments could also expand access for special groups by special scholarship schemes. It would remain open to the Commonwealth to provide funding to particular institutions for specific purposes under contractual arrangements.

### **Funding Research Training**

The funding of research training has thus far been built into the operating grants of universities. The Commonwealth Government is currently proposing to separate out this funding and to attach it to some 21,500 research training places to be allocated to universities by a formula based on their research degree completions, their publications and the research funds they attract. The research training places will bring with them funding to the universities at two rates according to cost, and averaging about \$23,000 per equivalent full time place per annum.

These new arrangements will cap the number of Commonwealth funded higher degree research places and encourage some concentration, but overall they will reinforce the

emphasis on quantity rather than quality. Institutions will tend to play the formula and compete aggressively with each other by enrolling as many research students as possible, in order to ensure that they at least maintain their relative share of a fixed quantum of funding.

The allocating of research training awards to the students themselves rather than to the universities would be a significant advance. Thus the Commonwealth should offer annually some 6,000 postgraduate research training awards. This number of new awards would support a total enrolment of about 21,500 awardees, which corresponds to the present level of funded research enrolments. An award would entitle the winner to, say, two years of equivalent full-time research training for a master's degree or four years for a PhD at a university willing to enrol him/her. The award would carry a subsidy to the university to cover the full cost of training. There ought to be, say, three levels of subsidy according to the cost of training: at current funding levels these would average about \$23,000.

Candidates for the awards should apply through the university of their undergraduate degree or through a university willing to give them status. The individual universities would place their candidates in order of merit. Candidates would be required to sit the Graduate Skills Assessment Test administered by the ACER. Their results in this would be used to calibrate university rankings so as to obtain a national ranking of the candidates.

Candidates successful in obtaining awards would select the institution at which they wished to train (not necessarily the university nominating them) and, if acceptable to the institution, would enrol there. Students should be encouraged to undertake their research at institutions other than those at which they were enrolled for their undergraduate studies. Funding them for an additional semester of study might be an effective way of achieving this. A width of experience is important. In Australia there has been far too little movement of research students. Students who do not obtain awards could be enrolled by universities on a fee paying basis. For these, access to HECS arrangements would be desirable.

The arguments in favour of concentrating the research activities of particular disciplines in a limited number of locations (see below) apply equally to research training, that is, the need for appropriate physical infrastructure and sufficient senior research staff. There has been a

tendency over the past ten or twelve years to enrol excessive numbers of research students either to attract funding or for reasons of prestige: evidence of this is the great rise in research student numbers from 14,600 in 1989 to 37,300 in 2000; of the latter 9,200 are at institutions which were not universities at the beginning of the period.

Concentration of research training would raise research quality generally and enhance students' training experiences. Such concentration could be achieved by restricting the tenure of research training awards in a particular discipline to those locations which are rated at higher levels in the research assessment exercise proposed below.

Final year studies for honours bachelor degrees are akin to research training: they usually involve a research project and are often preliminary to undertaking postgraduate research. Such studies need supervision by senior scholars and researchers. For these reasons a case can be made for concentrating final year honours studies in particular disciplines in those institutions eligible to enrol research training awardees.

### **Funding Research**

The provision of block funding to universities for research is essential to provide physical infrastructure, a staff base on which research activity can be built and a capacity to undertake long-term fundamental research unlikely to attract project funding.

Present block funding (the research quantum, research infrastructure block grants and the ARC small grants scheme), apart from being inadequate in amount, is spread too thinly across institutions. Funds are distributed by formulae which give insufficient weight to quality and which encourage institutions to expand higher degree enrolments, irrespective of their research capacity, and to foster research activity, irrespective of its intrinsic merit. The Commonwealth is proposing to increase research funding, but the changes currently being implemented through the Government's White Paper on research funding maintain the formula based approach to block funding.

In any given disciplinary field, research ought to be concentrated on those research teams whose members and facilities have the appropriate strengths; for example, in say 10 or so locations rather than spread over up to 38 universities. The concentration should be on a discipline not an institutional basis. Such concentration would unquestionably raise productivity and research quality.

Australia should move to an assessment of research strengths in universities along the lines of the Research Assessment Exercise which has been conducted in the United Kingdom for some years (RAE, 2001). The research activities of the universities would be classified on a discipline basis into units of assessment. Every five years a committee of senior researchers for each unit of assessment would review the relevant research activities in those universities seeking assessment in that unit. The committee would rate the quality of the activities. Institutional research grants (i.e. block funding to individual universities) would be calculated in relation to numbers of active research staff and research costs in each assessed discipline weighted by a quality index on, say, a five point scale. There would be no predetermined distribution of the quality ratings for a given unit of assessment; the classification would be based purely on absolute research quality. Some research groups might rate no support; some minor support; others might rate considerable support. Once the institutional research grant was determined for a particular institution (based on the ratings of its assessed disciplines) the allocation of the grant would be at the institution's discretion – support for disciplines not assessed could be provided.

The Research Assessment Exercise in the UK is a complex operation and is by no means universally popular, but it has been working effectively for 15 years and has recently been favourably reviewed. It concentrates research funding among the most productive and promising researchers. It does not aim at nominating particular institutions to be research universities, but concentrates on disciplines within universities. The allocation of institutional research grants along the lines proposed would concentrate activity in the most promising locations and enhance quality. All research groups would have the opportunity of being assessed.

The suggested reform will probably run into opposition because it will expose weaknesses as well as strengths. However, the concentration of research on a discipline rather than an institution basis should make it more acceptable. All universities would have research strengths in some disciplines. Moreover, the assessment of research would be regularly revisited, and institutions would be able to use institutional research grants to support any research considered worthwhile.

## CONCLUSION

The proposed reforms, involving the funding of most university courses through scholarships to students and the concentration of research activity on a discipline basis, have been canvassed by myself and others over the past decade (see, for example, Miller and Pincus). They have not received wide support. More surprising is that the proposed re-establishment of a statutory body to advise on higher education policy, administer higher education programs, and stand between the institutions and the government, has not been discussed to a significant extent; indeed its possibility was not even mentioned in the Review of Higher Education (West, 1998). In my view this is, perhaps, the most important of the reforms that I am suggesting.

Much of the opposition to the funding reforms stems from fears of rising fees, of unequal resourcing of institutions, of doctrinaire deregulation, marketisation and commercialisation and of barriers to access to university education. Most of these fears are unjustified: fees and higher education contributions will be moderated by competition and can be capped by government; institutions will be resourced in relation to the activities taking place within them; the elimination of direct involvement by government in universities' affairs is essential to the promotion of institutional autonomy, academic freedom and a diverse system of higher education, and, in any event, the government can set the ground rules, provide broad guidelines and determine the aggregate level of public financial support for higher education; access will be promoted by funding a sufficient number of scholarships, by maintaining and extending the HECS arrangements, by special programs for disadvantaged groups (especially in schools) and by promoting greater social and economic equality.

One of the arguments commonly used in supporting the provision of public funds to universities *via* students rather than directly is that this will create a competitive market for university services which will bring with it the efficiency and effectiveness benefits that flow from competitive arrangements. There is some force in this argument, but I am not relying too much on it for the reforms I am advocating. My justification for them has more to do with the maintenance of the independence of the universities and the pursuit of excellence than with the benefits flowing from market economics.

Students are not and cannot be well informed consumers in the same way as those who are operating in the market for detergent or automobiles or other ordinary goods and services. Ordinary goods and services have characteristics that are more or less well known. But the benefits to be rendered by a university course cannot be known with any precision to the intending student, nor can there be any symmetry in knowledge between student and academic. Also in any given locality there are necessarily relatively few university suppliers and certainly not a perfectly competitive market. Thus the optimum properties of competitive markets cannot be expected to hold in the market for educational services. Moreover universities, as non-profit and publicly assisted bodies, must respond to public interest considerations; for example, in the maintenance of scholarship and research in basic disciplines or in areas of national concern, even if student demand in these areas is low. It should be obvious from my proposals on funding and on research assessment that I am not advocating a free-for-all deregulated market for higher education, although this appears to be a common misinterpretation of what I am suggesting.

The reforms I have outlined will ensure quality higher education for a high proportion of the Australian population – in the long run about one half of the population will have attended university and more than one third will possess degrees of high standing. The reforms will also create numerous concentrations of scholarly and research activity at the forefront of the natural sciences and technology and in the humanities and social sciences. Thus the objectives of widespread access to higher education, of nurturing the most intellectually able and of providing an environment in which higher education can flourish will be served.

Higher education reform needs to be developed through an objective analysis of what is wrong with the present arrangements and how they might be improved for the benefit of Australia and Australians. Public policies should be judged by their consequences. It is a matter of what will work best, not of being bound by ideological predilections of whatever persuasion.

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