Australia’s Universities:
Building our Future in the World

A White Paper on Higher Education, Research and Innovation

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EXECUTIVE SUMMARY

This White Paper begins a dialogue to develop a new policy framework for higher education, research and innovation that fits Australia’s needs and circumstances.

Labor’s nation-building reform will result in real choice and higher quality education and training for individuals. Lifting up all universities is central to a Beazley Labor Government’s economic agenda to build a prosperous future for all Australians.

Economic imperatives

Australia has to pick itself up urgently. Productivity is falling. We are failing to innovate. Our economic competitiveness is slipping. Despite a resources boom, trade and balance of payments deficits are blowing out.

We are rapidly losing ground to both developed and developing countries.

Given the fast rate of technological change, it becomes harder and harder to catch up, and our competitors are not waiting for us.

They are making bold investments in new capabilities. We are living on borrowed time and borrowed funds from foreign savers. We cannot afford such complacency.

We must upgrade the skills of the nation, modernise our physical infrastructure, and scale-up our research capabilities in areas where we can play on the world stage.

We must connect Australian firms to the advanced know-how and sophisticated technology platforms they need to design, test and develop new products in Australia for export to the world.

Labor’s vision for Australia is not one where we try to compete globally on lower pay and lowered standards. Rather, we aspire to win on the world stage through higher skills and higher standards in workplaces, and in our schools, TAFEs and universities.

Higher levels of educational attainment, and the highest levels of research performance, must underpin productivity growth and Australia’s success as a modern economy.

Social imperatives

Population ageing will require increased expenditure on health care, pensions and personal services, and leave shortfalls in the size of the workforce, and in the taxation base.

Sustained productivity improvements will be essential for sustaining economic growth and maintaining living standards. The clever use of knowledge will become ever more important.
Everyone who can benefit should have access to affordable higher education. Those for whom the schooling experience was unrewarding, or for other reasons did not go on to further studies, should have a second chance to participate, and have the learning they have gained from their experience taken into account.

We have a responsibility to reform our national policies to ensure no one is unfairly excluded from participating.

Our universities and scholars can also contribute in special ways to the life of the nation. They question what we take for granted, offer different ideas, discover new insights, invent new technologies, and apply technologies in new ways. By doing so, they can help advance Australia as a modern economy and a vibrant democracy.

A society that undervalues critical thinking and the importance of challenges to orthodox views will be neither competitive nor compassionate.

**HIGHER EDUCATION**

**Problems with current policy**

The policies put in place by the Howard Government are inconsistent and unstable. They endanger the quality of Australian higher education and research, eroding rather than building our capacity to innovate.

They also reduce equity of opportunity, discouraging access from those who could benefit from higher education but who have limited financial means.

**Inflexible**

In 2003, the Howard Government designed a straightjacket for universities. Every university is paid the same amount for each student, irrespective of differences in their missions and purpose, student mix, and cost structures. The Government’s insistence on funding every university at the same rate per student is the basic constraint on diversity in the system.

Universities are penalised if they enrol above or below their undergraduate enrolment quotas. They have no flexibility of operation. Without approval from Canberra, universities cannot move places from one campus to another, or from one semester to another, or across the funding clusters; and they cannot change their range of courses.

They cannot even change how they use a piece of research equipment purchased through government grants without the written approval of the Education Minister.

Additionally, the Government has tied up universities with restrictive compliance conditions and reporting requirements.

The Government claimed it wanted to diversify the higher education system through price competition by letting universities raise HECS by up to 25%. However, almost all universities charge the maximum HECS. There is no price competition within the publicly-funded system, just higher prices.
Underfunded

The Government’s refusal to provide adequate indexation for our universities has left the Government with two main options: to raise HECS rates further, or rely increasingly on full-fee places.

The significant HECS increases have adversely affected student participation and denied Australia the human capital investment needed to underpin future productivity growth.

The idea that higher education can be treated entirely as an ‘industry’, like banking, with closures and mergers of universities, is fanciful.

Universities are important to their communities for a wide range of purposes. The Howard Government has treated higher education merely as a private good and neglected its broader role in knowledge advancement and community benefit.

Current policies require universities to expand their student numbers, especially international students, regardless of their missions, roles and circumstances.

Quality under threat

The consequence is that quality of Australian higher education is under pressure, with risks to the reputation of Australian degrees.

There are no systems in place in Australia for assuring the standards of degree quality.

Compared with 30 years ago, there are now four times the number of students in higher education, twice the number of universities and 10 times the number of private providers. With the rapid growth in the number of students and new higher education providers, concerns have been raised about the quality of Australian degrees.

Funding cuts have pressured universities to chase revenue, increase student numbers, raise student to staff ratios and class sizes, cut back tutorials and cut corners on student assessment.

The Government recognised the problem in 2002 when it noted allegations of “falling standards, courses lacking academic rigour, deterioration of the calibre of students entering university, and claims of softmarking.” But nothing was done to address these concerns.

Concerns have been raised by international students, foreign governments and employers about the quality of offerings by some Australian higher education providers.

In June 2006, the Asia Working Group advising the Prime Minister’s Science and Innovation Council reported:

“There is the belief held by the working group that the quality of our university degrees is declining.”
We need to raise higher education standards generally, to give our students the best opportunity to develop their abilities and to build a competitive economy.

Students deserve the confidence that they will receive a high quality education, and that their degree will be recognised, in Australia and overseas, as a credible qualification for work and further study.

Employers are entitled to expect the highest standards when they hire Australian graduates. They should understand also the meaning of different grades of higher education attainment.

We should expect the best from our universities because of the public investment they receive.

It is not to the advantage of any higher education institution to be part of a system that does not assure at least minimum standards of quality of its educational qualifications.

Yet Australia has no way of knowing whether minimum acceptable standards of a degree are achieved. We have no reliable information about the grades of achievement of different graduates of different institutions in different fields of education.

Labor’s commitment to increase investment in higher education is predicated on a reciprocal commitment by universities and other providers to demonstrate higher standards of higher education quality.

**Labor’s higher education policies**

In today’s market-driven environment, policy must promote competitiveness, diversify choices for students, demand high standards of quality, and safeguard community benefit.

Labor supports competition and will encourage diversification and innovation in the provision of higher education.

**Quality**

Labor is committed to increasing public investment in higher education and research, including through better indexation of university operating grants, linked to quality improvement.

Labor will strengthen the processes of accreditation and quality assurance of all institutions and providers offering Australian higher education qualifications.

A new *Australian Higher Education Quality Agency* will be established, jointly owned by the Commonwealth and the States and Territories, to bring consistency to accreditation assessments and evaluations of higher education quality. The new Agency will replace the existing body.

Labor’s approach is not one of taking over responsibilities from the States. Rather it is to work with them cooperatively to achieve agreed goals.
Standards reviews will be conducted for each major area of study, starting with Teacher Education, Nurse Education and Business Studies. They will establish the minimum acceptable standards of student achievement for qualifications in each field.

**University financing**

Our universities will have the freedom they need to operate competitively.

Labor will end Government interference in the internal management of universities, and reduce compliance and reporting burdens. Labor’s stronger focus on the quality of educational outcomes will loosen the Howard Government’s excessive controls on inputs and processes.

Workplace relations and governance conditions attaching to funding will be removed.

The independence of the Australian Research Council will be restored.

Labor will restore rolling triennial funding to give universities certainty in planning.

All universities will be better off under a Beazley Labor Government.

Labor will fund public universities through a compact, negotiated to value universities’ individual missions and their different roles and circumstances.

There will be a compact with four components of funding that universities will be funded for:

i. **Education** – undergraduate and postgraduate programs (except research degrees). Teaching cost relativities will be updated, reflecting clinical, laboratory/field and classroom learning. Funds will include regional loadings and loadings for students with special needs. Within its funding envelope, a university may shift places from low to high cost fields, and from undergraduate to postgraduate level, or vice versa. The Commonwealth will safeguard courses of national priority.

ii. **Research and research education** – dual funding, through national competitive grants and institutional block funds. Funding of places for research students will be provided only in those areas where the quality of research performed within the university meets high standards. Academic staff of all public universities will have opportunities to undertake research, either at their own institution or other universities;

iii. **Community outreach** – the provision of services to meet community needs, access to university facilities by community organisations, support services to schools, and actions to address community concerns;

iv. **Innovative activities** – structured activities additional to normal operations, including knowledge transfer services to businesses and other groups, collaboration with other universities and institutions, accelerated study programs, and education and/or research aligned with the northern hemisphere academic year.
Every university will be funded for the first component but need not be funded for all four. Universities will determine their priorities, and shape their activities to suit their different missions. The excluded option is that of the ‘teaching-only’ university.

All academic staff must have the opportunity to conduct research.

Labor’s approach will promote improved responsiveness of universities to student demand and community needs. It will enable universities to focus on what they do best.

The mission-based compacts will facilitate diversification of the higher education system, wider student choice and the continuation of university functions of wider community benefit that would otherwise be lost in a purely market-driven system.

**Student participation and support**

Labor will relieve the HECS burdens on students. This White Paper includes a number of options to reduce the very heavy HECS debts facing Australian students. The details of this relief will be announced in our final policy.

Labor will put an end to full-fee places for Australian undergraduates at public universities. Under Labor, students will gain access to higher education according to their merits, not their financial means.

Labor will provide students with improved financial support while studying and restore campus amenities, services and student representation.

FEE-HELP will continue to be available to accredited private higher education providers. Private institutions which have Commonwealth-supported places will retain those places.

To improve the graduation rates of Indigenous students, Labor will provide incentive payments to universities for Indigenous student enrolments in the second, third and fourth years of a Degree course.

Extra funding will be provided to expand Commonwealth supported student places at Associate Degree level in TAFE colleges and universities.

Shortfalls in the preparation of high-level technicians and associate professionals constitute a major, long-term skills shortage for Australia.

By expanding the availability of Associate Degree programs through universities, and TAFE colleges, higher education will become available to a broader range of students. It will also facilitate qualifications upgrading for people in the workforce with Certificate and Diploma qualifications.

This initiative will expand access to higher education for many more communities in rural, isolated and outer metropolitan areas where there are no university campuses.
It will also widen choices for school leavers, and reduce the pressure on a number of them to prepare at high school for direct admission to a Bachelor Degree program.

**Research**

Labor will maintain the dual system of funding research through national competitive schemes, and funding research infrastructure through institutional block grants.

Labor will initiate a rigorous process of evaluating the quality of the research education environment and the research performance of PhD supervisors.

Labor will ensure that PhD and Masters by research students are admitted to candidature only in those fields of research where universities can demonstrate that they are performing excellent research on the basis of independent external validation.

Labor will develop major research hubs to ensure that Australia has world-class, world-scale research capabilities in key areas. The initiative will help build critical mass of expertise in priority areas, establish hubs fitted with state-of-the-art equipment, and attract star international researchers to build research teams in those centres.

Labor will invest in a long-term program to renew Australia’s professional researcher skills base in Science, Mathematics, Engineering & Technology.

Labor will continue and enhance the existing commitments to research funding under *Backing Australia’s Ability*. Labor will revitalise the Cooperative Research Centres Program, and restore capacity and confidence in CSIRO.

**Innovation**

Labor will establish *Enterprise Connect* – a network of 10 innovation centres across the country to connect people in business with the experts in universities, public research agencies and TAFEs.

Businesses, particularly small and medium sized enterprises, will be able to go to *Enterprise Connect* centres to seek scientific, technical and business advice on improving productivity, find and adapt new ideas and research located in public research institutions around the country, find relevant experts for specific projects, take up new technology and test new products and processes.

Labor will fund up to 200 *Australian Knowledge Transfer Partnerships*. Each *Knowledge Transfer Partnership* will involve a business and either a university, TAFE or public research agency to develop and improve products and services in that business. Each project will employ a recent graduate, postgraduate, post-doctoral researcher or TAFE Diploma holder.
Conclusion

This paper sets out the broad directions for higher education policy under a Labor Government. Labor is committed to a substantial increase in public funding for higher education. This paper sets out the key priority areas where Labor believes increased funding is required, and invites comment on how those priorities in turn should be ordered.

While Labor cannot satisfy all the priorities identified in one go, we are building a program of long-term reform of higher education. Public consultation will assist us in identifying the most urgent reform priorities, and enable us to refine our longer-term commitments for a better higher education system.
INTRODUCTION

This White Paper addresses pressing challenges for Australia.

Australia’s productivity has fallen over time. We are failing to innovate. Our economic competitiveness is slipping. Despite a resources boom, trade and balance of payments deficits are blowing out.

In terms of competitiveness we have ground to make up on developed countries of the northern hemisphere, while China is making significant strides. We are falling behind southern hemisphere countries, like Brazil, in areas of traditional competitive advantage, such as minerals exploration.

Given the fast rate of technological change, it becomes harder and harder to catch up, and our competitors are not waiting for us. They are making bold investments in new capabilities. We are living on borrowed time and borrowed funds from foreign savers. We cannot afford such complacency.

The Working Group on Asia, in its report of June 2006 to the Prime Minister’s Science Engineering and Innovation Council, noted with alarm:

“Not only do we not have the capacity to improve our position as a knowledge economy, our ability to sustain our current position is doubtful.”

We must upgrade the skills of the nation, modernise our physical infrastructure, and scale-up our research capabilities in areas where we can play on the world stage. We must connect Australian firms to the advanced know-how and sophisticated technology platforms they need to design, test and develop new products in Australia for export to the world.

Population ageing will require increased expenditure on health care, pensions and personal services, and leave shortfalls in the size of the workforce and in the taxation base. Sustained productivity improvements will be essential for sustaining economic growth and maintaining living standards. The clever use of knowledge will become ever more important.

The ageing population also requires higher levels of productivity to be achieved through (a) more intensive skills formation of young people, (b) higher workforce

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1 Labour productivity fell from an annual rate of growth of 3.2% over 1993-94 to 1998-99, to 2.2% over 1998-99 to 2003-04 and was 1.3% negative in 2004-05. Multifactor productivity fell from an average annual growth rate of 2.1% over the first cycle to 1.0% in the second cycle, and was 1.7% negative in 2004-05. Productivity Commission, presentation to Productivity Perspectives 2006.

2 34.8 per cent of Australian businesses engaged in innovation activity in 2001-03. In Manufacturing, the proportion of businesses innovating fell from 41.7% in the period 1991-94 to 39.5% in the period 2001-03. Australian Bureau of Statistics, Innovation in Australian Business, Cat. No. 8158.0.


4 Reserve Bank of Australia, Balance of Payments, Current Account March 2006.

5 IMD World Competitiveness Scoreboard, 2005.


participation by the adult population, and (c) greater levels of continuous adult learning.

Effective education and training underpins productivity improvement and international competitiveness. Public investment will be needed to ensure Australia has sufficient high quality skills and to enable increased participation and attainment by people who would otherwise be marginalised.

Australia does not face these challenges alone, but rather with many other countries, all looking concurrently for skilled people.

We face the prospect of being the first generation in Australia’s history to leave our children worse off. We are passing on to our children and their children, not only more intractable environmental and geo-political problems, but also new responsibilities to provide for a growing dependant older-age population.

At the same time, talented Australians are being deterred by rising costs from participating in the education and training they need to realise their potential, and to make the productivity gains the nation requires.

There are signs too that standards of higher education are deteriorating, and that Australia is under-investing in the research capabilities needed to solve or ameliorate the problems that future generations will inherit.

Labor’s vision for Australia is not one where we try to compete globally on lower pay and lowered standards. Rather, we aspire to win on the world stage through higher skills and higher standards in workplaces, and in schools, technical colleges and universities. Higher levels of educational attainment are a foundation for productivity growth and a platform for Australia’s success as a modern economy.

Australia needs to raise achievement in education and training and innovation so we can show the rest of the world what we are capable of doing.

We need to give more purposeful attention to building on the good ideas of Australians, developing their potential in Australia, and exporting them as products and services to world markets.

We envisage Australia as an inclusive, dynamic and diverse society, whose people have dignity and respect.

The future is ever more demanding, and Australia must have policy settings that are the essential underpinnings of democratic community wellbeing, economic competitiveness, and environmental sustainability.

Almost twenty years ago, a Labor Government issued a policy discussion paper that gave rise to a range of reforms to the scale, structure, and financing of Australia’s higher education system, including higher education research.

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The 1987 policy discussion paper called for “a process of critical assessment and consultation that involves governments, institutions, firms and the broader community working together.” It challenged all interested parties to consider “what demands and expectations the country has of its institutions and whether the institutions are responding to those demands and expectations”, and it asked the institutions themselves to define, “what they see as their role in the social, cultural and economic lives of Australians.”

It is time to revisit those questions, and also to ask: what is the most appropriate policy framework for advancing shared interests and goals?

On the one hand, Australia has done many things well. We have managed a reasonably smooth transition from elite to mass higher education participation, increased the responsiveness of tertiary education institutions to changing labour market needs, and strengthened collaborative links of universities and publicly-funded research agencies with industry.

Indeed, other countries draw on Australian policy initiatives, such as the Higher Education Contribution Scheme (HECS), and the Cooperative Research Centres program (CRCs), and Australia’s success in the export of education services.

On the other hand, not all of the policies put in place since 1988 were, with hindsight, coherent and cost-effective for higher education. All the outcomes were not intended either, especially the convergence of universities to a uniform model. That outcome arose from traditional academic norms and central planning requirements together driving institutional behaviours.

When it came to office in 1996, the present Government cut higher education outlays by $1.8 billion over four years. Higher education was seen as an area for making savings. Much of the course of higher education policy and institutional behaviour trends over the subsequent decade has flowed from that 1996 Howard Government decision.

A Committee was formed in 1996 to advise on the future policy and financing framework for higher education. Its 1997 report, Learning for Life, recommended universal post-compulsory education and training ‘learning entitlements’. The Government rejected the West report and has never developed an alternative policy framework.

Vocational education and training policy has developed separately from policy for higher education. As a result, students have fallen through the cracks of the sectors and a major gap has emerged in Australia’s tertiary education and training system. A serious consequence of that policy gap is the gap in preparing the high level technicians and associate professionals needed for the changing, modern economy.

At the same time, a number of Labor Government initiatives have continued to be developed over the last decade, such as growth in funding for peer-reviewed research, strengthening of protections for international students, and incentives to improve the quality of university teaching. Additionally there has been agreement on national protocols for higher education accreditation and the formation of a system of quality assurance audits.
However, since 2001 in particular, there has been a raft of ad hoc changes to policies and programs, year after year, lacking consistency and generating uncertainty. Reduced Government funding has been accompanied by intensified Government regulation. The policy drift has allowed the system to go dangerously off course.

There are no clear expectations about the most basic dimensions of the national system, such as: the balance between public and private costs of activities; the balance between graduate supply and labour market requirements; the roles of different institutions; the standards of educational qualifications; the relationship between research and higher education; the relationships of universities with the community; the role of government, and limits to its role.

It should not be expected that policy frameworks or institutional arrangements and ways of operating stay fixed in an environment of dynamic change. However, the many incremental shifts in the policy framework over the last 10 years, have not helped to improve the functioning of institutions, nor enhanced benefits for students, nor led to desired social, cultural and economic gains.

This White Paper addresses Australia’s pressing challenges from first principles. It seeks to identify those aspects of current policy that are worthwhile continuing and enhancing, and those aspects that should be discarded and replaced with a fresh approach.

Our aim is to begin a dialogue that will lead to an overall policy framework for higher education and research that fits Australia’s needs and circumstances in a balanced and coherent way.

We invite your feedback on the analyses we make and the proposals we suggest.

A series of open consultative forums will be organised in each State and Territory. Meetings will also be arranged with particular interest groups. Special notice will be given in advance of those events.

Proposals will then be reviewed and revised in the light of the feedback we receive, and form the basis of Labor’s policies for Government.

We look forward to your advice.

Written responses to the White Paper are invited before 19 September 2006, and can be addressed to:

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OR

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PART I - CURRENT CHARACTERISTICS, CHANGES AND CHALLENGES

1. Higher Education

1.1 Background and current position

It was a Labor Government that, in 1988, designed policies to expand higher education participation as a means of improving Australia’s international competitiveness. Labor in Government funded unprecedented growth in student places and increased funding for higher education research and research education.

Labor in Government initiated HECS as an equitable mechanism for a fair sharing of the costs of higher education between general taxpayers and students, reflecting the balance of private and public benefits from the investment. HECS ensured that there were no up-front financial barriers to access, and that the opportunity to participate was based on merit rather than ability to pay.

It was a Labor Government that encouraged universities to diversify their sources of income, to face the market, reduce their dependency on government, become more responsive to the needs of students and end-users of research, and innovate.

Labor in Government opened up opportunities for international students to study in Australia on a full-fee basis. Now, education is Australia’s fourth largest export, after iron ore, tourism and coal.

Labor also opened up postgraduate education for Australians on a fee-paying basis. This policy development reflected the priority of enabling students to obtain their initial qualification, with a HECS tuition subsidy.

Labor in Government introduced programs and incentives to promote closer university links with industry in research and education.

The advent of the Howard Government in 1996 gave rise to increased costs for students and cuts to university operating grants. The Government sees higher education as primarily a private good.

Significant among the 1996 changes were those to HECS rates. A particularly regressive decision was to lower the income threshold triggering repayment of HECS liability. That decision was partially reversed in 2003.

The enduring change from 1996 was to increase and differentiate HECS prices into three bands, and that change flowed through in important ways, to the 2003 model of ‘funding clusters’ as the method for allocating funds to universities for teaching purposes.
In the ensuing years of squeeze on university finances, exacerbated by the widening gap between university costs and the inadequate rate of indexation of operating grants, many universities pursued faster growth in non-government income, primarily from international students and domestic postgraduate students.

Several universities over-enrolled domestic students at marginal funding rates. New threats to the quality of Australian higher education emerged as a result.

In 2003 the Howard Government introduced top-up HECS and more full-fee places, to further the reliance of public universities on private income sources, and introduced FEE-HELP, to encourage the growth of private providers of higher education services.

The rise in private sources of income across the sector, however, has not been sufficient to offset the erosion of public funding for universities, and the overall funding rate per student has deteriorated.

As the OECD has noted, Australia has failed to maintain a balanced approach to higher education financing, where private spending complements public investment rather than substitutes for it:

“…many OECD countries with the highest growth in private spending have also shown the highest increase in public funding of education. This indicates that increasing private spending on tertiary education tends to complement, rather than replace, public investment. The main exception to this is Australia, where the shift towards private expenditure at tertiary level has been accompanied by a fall in the level of public expenditure in real terms.”

The concentration on the private economic benefits of higher education has been associated with a far-reaching shift in financing responsibilities away from the general public to the individual student. That shift has been accelerating over the past decade.

There are certainly more students but there is less public funding in aggregate, and less public funding per student, and more conditions of compliance with Government requirements attaching to it. As a result, university revenues are more fragmented, less predictable and less discretionary, and capacity to serve broad economic and social purposes is eroding.

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1.2 The changing nature of higher education

Growth and diversification of student enrolments

Higher education student enrolments reached ¼ million in 1974, rose to ½ million by 1992, and today total almost 1 million. Almost ¾ million Australian students are now participating annually in higher education, predominantly in public universities. Additionally, ¼ million international students are enrolled with Australian providers of higher education services, including public and private institutions and public-private partnerships.

We have seen major increases in the ratios of adult to youth, and female to male participants. The international student body has grown rapidly over a decade from less than 10% to around 23% of enrolments on average (in 13 universities, it is over 25%).

Increasing reliance on student fees

In 2004, Commonwealth grants for teaching purposes represented 23% of total university operating revenue. An additional 16% of total revenue was derived from competitive programs of performance-based schemes, such as for research and research infrastructure, funded by the Commonwealth. Total Commonwealth payments represented only 40% of higher education revenue in 2004, compared with 60% in 1994.

Students are contributing an increasing share of the costs of higher education. Student fees and charges accounted for 22% of revenue in 2004, compared with 11% in 1994. Even though there has been a doubling of income from students, this has not compensated for the withdrawal of Government funding. Income through HECS in relation to domestic students totalled $2 billion in 2004. At a number of private institutions and at some universities, students pay amounts well in excess of the costs of provision. International student fee income provided $2 billion in 2004, and $1 billion was obtained from other fees and charges.

International students and Australian postgraduate students pay fees normally covering at least the full cost of provision. The great majority of Australian students undertaking higher degree by research are not required to pay HECS or fees.

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New forms of higher education provision

Around the world, higher education systems are being re-shaped through greater competition among established institutions, the growth of new providers, including not-for-profit and proprietary providers, domestic and foreign, and the growing capacity of on-line learning. There are multiple ways of obtaining qualifications, such as through product vendors, professional associations and training houses of global corporations.

Australia has experienced rapid growth in recent years of not-for-profit, religious, and small proprietary businesses providing education and training services, including higher education courses at preparatory, Diploma, Associate Degree Bachelor and Master Degree levels. International universities and for-profit corporates are now entering the Australian market in niche areas.

A major area of growth in demand for higher education is generated by adult learners, and the supply of services to meet their needs includes universities, TAFE colleges, and private education and training providers. Adult learners are the primary target of new private providers, and many of them seem to have identified some core expectations of market segments: customisation (to firm-specific needs, or professional certification requirements), convenience (ease of access, availability of classes in evenings and at weekends, on-line access, workplace-based activities), practicality (relevant to job needs and experiential ways of learning), quality (standardised curricula, teachers with teaching qualifications, consistency of delivery to expectation; recognition for employment or further learning), and price.
Growth of private providers of higher education services

In 2004, there were in excess of 700 private providers of education and training services in Australia, catering to more than 200,000 students. There are presently 30 accredited private higher education providers listed on the register of the Australian Qualifications Framework, compared with 37 public universities.

In international education services, as in training services for Australian enterprises and individuals, supply is highly competitive, to the advantage of students and employers. There is scope for further competitive activity in these areas, including growth in private provision of services, and the availability of FEE-HELP will expand student participation in private institutions.

The internationalisation of higher education

The demand for higher education is continuing to rise beyond the supply capacity of many developing economies, particularly in Asia. As a developed English-speaking nation in the broad Asia region, Australia can contribute to serving that demand. Australians can benefit too through the formation of business and diplomatic networks, and the cultural diversification of students and curricula, as well as through the trade in education services.

Most of the current international students originate from a few source countries and are enrolled in a narrow range of fields of education.

There is growing competition of other country suppliers, as well as expansion of domestic supply within Australia’s traditional source countries of South-East Asia, notably Malaysia, Singapore, Hong Kong and Indonesia.

The risk for Australia’s education exports industry is that Australia will not be the favoured destination for the high quality students.

Much depends on the reputation of Australian higher education, the quality of student experiences and the standards of degrees. Our competitors can be quick to exploit deficiencies in the quality of Australian providers.

With the growth of new providers of higher education and new modes of delivery, and in the context of internationalisation, the Commonwealth and the States & Territories agreed, in 2000, a set of National Protocols for Higher Education Approval Processes. Protocol 1 covers criteria and processes for recognition of universities, including protection of the title ‘university’.

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16 see Appendix 1.
Impacts of change on public universities

The pressure to chase new revenue alternatives led many institutions to distort their missions in pursuit of unfocussed and disparate ambitions. Public universities are operating increasingly, and some essentially, as commercial enterprises, notwithstanding the purposes of their statutory establishment.

A number have become highly dependent on income flows from volatile and increasingly competitive markets for international education and adult learning. A few universities are further exposed because of declining student demand in their regions, and/or by the metropolitan universities sourcing their growth from regional students. Concerns have arisen about the viability of some universities.

Implications for public policy

The Howard Government has not accepted its responsibility for sustaining Australia’s knowledge capabilities in the face of intensifying international competition, and ensuring adequate supply of skills to meet changing domestic labour market requirements.

The universities are fettered by the Government’s uniform and tight funding conditions when they need greater room to move in competitive markets.

Higher education policy has gone dangerously adrift.

1.3 Problems and challenges

The liberalisation of trade in education services is giving rise to concerns among participating countries to protect their students from sub-standard providers issuing qualifications that will not be useful for employment or further study.

The growing international activity of Australian higher education providers has increased the exposure of Australian educational qualifications to external scrutiny by prospective students, foreign governments and employers of graduates.

Doubts about the quality of degree standards

Cases have been brought to media attention in Australia and overseas, reflecting poorly on the standards of higher education offered by some Australian institutions. A few universities, along with some private providers, are regularly subject to queries about quality. Yet nothing is being done to seriously address these concerns.

As a result the reputation of Australian qualifications generally is at risk, and along with it the future employment and educational prospects of graduates, the education exports markets, and the viability of universities and other providers involved in international education.

The Government was aware of this problem back in April 2002 when it launched its ‘Crossroads’ discussions. On the one hand, the discussion paper noted allegations of
falling standards, courses lacking academic rigour, deterioration in the calibre of students entering university, and claims of ‘softmarking’. On the other hand, it noted “all Australian higher education institutions state that they provide their students with a high quality educational experience.” However, it recognised that it had no way of reconciling disputed claims:

“In Australia external examination is rare in undergraduate education and little is known about relative standards across institutions or between different courses within institutions.”

Nothing has been done subsequently to address the problems identified. The problems have not gone away. Indeed the concern is spreading. The Prime Minister’s Science, Engineering and Innovation Council was advised in June 2006:

“There is the belief held by the working group that the quality of our university degrees is declining.”

The Australian Universities Quality Agency (AUQA) undertakes audits of university processes but does not probe educational standards. It has commended some institutions for good processes while they have been simultaneously exposed elsewhere, such as in China, as failing to meet acceptable standards of performance.

The AUQA adopts a whole-of-institution approach. Its audits look at quality assurance processes for the administration of a university as well as its education and research. Hence, it considers a wide range of activities rather than focussing on those aspects that have a direct bearing on the quality of learning and teaching.

AUQA has limited capacity to drill down into differences in the standards of a degree across different fields of education.

For all of the costs and reporting burdens its processes impose on universities, AUQA is not providing the assurance the community expects and needs about the quality of Australian higher education.

Countries like Singapore and Malaysia are very selective of the Australian universities whose graduates they accept for professional practice. Their selections tend to reflect indicators of institutional prestige, and not necessarily the performance standards of particular programs.

The quality of Australian higher education remains under pressure, with risks to the reputation of Australian degrees. International students have already expressed concerns about the quality of education provision at some Australian universities.

There are no systems in place in Australia for assuring the standards of degree quality. We have no minimum, acceptable degree standards that must be met at least by all providers. Nor do we have any reliable information about the grades of excellence achieved by different graduates of different institutions in different fields of education.

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The revised (June 2006) national protocols for higher education approval processes are designed to promote the further diversification of providers of higher education, including ‘specialist universities’, ‘self-accrediting institutions other than universities’, ‘university colleges’ and ‘overseas institutions’ offering their own qualifications (see Appendix 3).

The revised national protocols also extend quality assurance processes to existing as well as new institutions. That is, all higher education institutions will be regularly assessed for the quality of their performance.

It is all the more important, in this context, to ensure that robust arrangements are in place for assuring the community about the standards of Australian higher education.

It is not to the advantage of any Australian higher education institution to be part of a system that does not assure at least minimum standards of quality of its educational qualifications.

Students deserve the confidence that they will receive a quality education and that their degree will be recognised, in Australia and overseas, as a credible qualification. Employers are entitled to expect the highest standards when they hire Australian graduates.

Private sector providers must satisfy initial accreditation requirements, and these are based on input factors, such as qualifications of staff, curriculum frameworks, and physical conditions for learning. The Australian Universities Quality Agency audits the State & Territory accrediting authorities for their adherence to the required accreditation processes.

Standards of academic achievement at public and private providers of education are not assessed by the national audit agency, or by State & Territory authorities.

Under the provisions of the Education Services for Overseas Students Act, State & Territory accreditation authorities, and the Commonwealth, have powers to require that private providers meet minimum specified input requirements and comply with a code of conduct relating to the treatment of international students. The powers are strong, and are about to be further strengthened, but they relate primarily to adherence of students to their visa conditions. They do not address the standards of learning.
The growing student debt burden

When HECS was introduced in 1989 the standard rate was $1,800 per year. In 2006, the rates vary across 4 Bands, ranging from $3,920 to $8,170 per year. For Law and Medicine students HECS has risen by $6370 or 350% - an average annualised rate of 27%, around five times the rate of inflation.

The national HECS burden is now $13 billion and rising. The growth in student debt is rising faster than the increase in student numbers and reflects increases in the debt burden per student.

Many HECS students are now incurring debts in excess of $40,000 on graduation, and some $50,000. Many full fee courses cost in excess of $100,000.

The available evidence indicates that students from lower socio-economic backgrounds are most adversely affected by the increasing costs of HECS. 20

Increases in tuition costs in recent years have deterred the participation people on lower incomes. Measures must be taken to arrest the increasing cost burdens on students, so that they can enjoy the benefits of higher education and the community can benefit from the productivity improvement they will help generate as graduates.

Several studies have reported problems associated with the debt burdens of graduates, including reduced capacity to save the equity needed to buy a first home, delays in family formation, and reduced willingness to undertake further study.

The most recent evidence indicates that students of lower socio-economic status defer a much larger proportion of their HECS than students of higher economic status, and that those with the bigger debts are likely to suffer the greatest in terms of wealth accumulation, with the result that:

“the gap between richer and poor individuals will widen and the measured income inequality between students who pay their HECS up front and those who defer will be more pronounced later in life.”

Source: DEST Higher Education Report 2004-05

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21 Mudd, W., Tesfaghioris, H. & Bray, J. (2001), Some issues in home ownership, Policy Research Paper, No 17, Department of Family and Community Services, Canberra.


Low success rates for Indigenous students

Despite the growth in participation over the decade the number of Indigenous graduates has remained at around 1,000 per annum. At 62.3 per cent, the non-completion rate of Indigenous students is much higher than the average rate of 36.7 per cent for all other students. Indigenous graduates are declining as a proportion of total Australian graduates.

Opportunities need to be available for Indigenous people to gain access and adequate support while at university, build their skills, and improve their job prospects. It is important that a higher number and proportion of Indigenous people obtain the professional qualifications they seek.

Labor will give priority to increasing the number of Indigenous graduates.

Student support

The capacity for students to undertake a higher education depends on their financial security. Without adequate support, from either personal income or from family or government, students cannot study. Most Australian university students attend a university close to their family homes. This is in part cultural and partly a reflection of the difficulty many students face in accessing adequate income independently of parental means. Students in rural areas who have to move from their parental homes can find the lack of income support prevents them undertaking higher education. For mature age students many of whom have family responsibilities, the very low level of student income support often deters them from gaining a higher education.

More students are working today, and working longer hours than 20 years ago, and this is having a detrimental impact on their studies. There has not been a Government initiated review of the student income support system since 1992, and the recommendations of the Senate’s 2005 inquiry into student income support remain unanswered. The Senate Inquiry found that “the student income support system has operated in a policy vacuum for too long, and is showing clear signs of policy neglect and poor service delivery.”

Income support is provided to different groups of students through Youth Allowance, Austudy and Abstudy. Rent assistance is available for Youth Allowance recipients.

Youth Allowance is the primary income support payment for undergraduate university students. The largest bearing on eligibility for this payment is the parental means test. All students assessed as dependent on their parents receive payments affected by their parents’ income. The parental income test applies when parental income is above $29,550 (this is increased if there are other dependent children in the family). The rate of Youth Allowance payable is reduced by $1 for every $4 of income over this amount. Students are only assessed as independent of their parent’s income as
once they turn 25, or if they are able to meet certain activity or income tests, or have family responsibilities.

Austudy is the payment for full time students over the age of 25. Unlike Youth Allowance, there is no parental means test, although personal income and assets tests do apply. Rent assistance is not paid to students on Austudy.

Indigenous tertiary students are eligible for Abstudy. Recipients are subjected to similar personal and parental income and assets testing as for other payments. Abstudy has a slightly different payment structure. Abstudy rates for students over 21 are inflation adjusted biannually, while payments for those under 21, as with all Youth Allowance and Austudy payments, are only adjusted on an annual basis. Indigenous Masters and Doctoral students are eligible for Abstudy.

The personal income test allows students to earn $236 per fortnight before payments are reduced. Payments reduce as personal income increases. Payments cease altogether when personal income reaches an amount of between $554 and $861 per fortnight, depending on circumstances, such as a person having a partner, or dependents. Due to the seasonal nature of their study commitments, students have access to an income bank to enable them to earn more in certain periods and ‘bank’ this income up to a certain level before their payments are affected. Youth Allowance, Austudy and Abstudy payment rates and the family means test are annually indexed, whereas the income a student can earn before their payments are affected has remained a constant $6000 since 1993. Low thresholds for personal earnings before Youth Allowance rates are cut can force many students into the cash economy to earn liveable incomes, stripping away any remaining workplace protections and increasing their susceptibility to exploitation.

Increasingly, professional associations require postgraduate qualifications for accreditation. Students, such as those in Psychology, are required to undertake a Masters level course to obtain professional registration. However the current income support system does not extend to support students undertaking postgraduate level qualifications necessary for entry into the professions. Changes to the structure of university course progression, such as that proposed by the University of Melbourne, also present new challenges for income support. Students in the new Masters qualifications such as Law, Medicine, Dentistry, Primary Teaching, Architecture or Nursing, would not be eligible for income support under current rules.

**Reduced student services**

The capacity for universities to offer non-academic student services and amenities was removed by the Government’s Higher Education Support Amendment (Abolition of Compulsory Up-front Student Union Fees) Act 2005. The Voluntary Student Unionism (VSU) legislation, as it is known, marked a triumph of extreme political ideology over necessary student support, amenities, activities and representation. The legislation inserted new sections into the Higher Education Support Act 2003 further increasing the intrusive nature of that Act and interfering in the internal affairs of our universities.

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Commonwealth grants to universities are now conditional on the universities not levying any form of compulsory fee for non-academic purposes, and universities are prohibited from requiring students to be or become members of any student organisation. In addition to conditional funding, extra financial penalties exist for universities who do not comply.

VSU, implemented on 1 July 2006, has already destroyed vital campus services that support university students and led to the loss of hundreds of jobs. Health services, child care, sporting infrastructure, counselling, clubs and societies, orientation activities, financial, housing, employment and legal support services, student representation and advocacy are all threatened by the current Government’s ideological vendetta.

The rich environment of sporting, cultural, and artistic pursuits that existed prior to VSU will now be a distant memory on campuses. Student clubs and societies, which for so long have been the social backbone of the university experience will lose their funding and struggle to survive. Universities may not be able to showcase these social and cultural experiences to the international marketplace.

The representation and advocacy services provided by student organisations are a critical, independent avenue for students, should they need support and redress when dealing with their university. VSU cuts away the vital help for individual students if they need to appeal their grades, seek assistance against unfair treatment, or if they have fallen victim to all too common administrative glitches. This kind of persistent work, practical advocacy by student organisations for individuals and groups of students is not possible without funding.

The support that non-academic services and amenities give to our university students has been undermined for the sake of settling generations old ideological scores. This approach has no place in the modern Australian university, and the university experience for the thousands of students who commence from now on will be severely diminished as a result.

The inadequacy of public funding of universities

Salary costs are the largest component of university operating expenses, ranging between 45 and 70 per cent.30 In the coming year university operating grants will increase by just 2 per cent.31 By comparison, average weekly earnings rose by an average of 4.5 per cent annually between 1998 and 2004.32

Since 1995, the gap between rising average salary costs and the rate of indexation provided by the Commonwealth has accumulated to more than $500 million.33

The Government conducted a so-called ‘review’ of indexation in early 2005. At a time when 10 universities were known to be in deficit,34 that ‘review’ concluded,

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“Given the generally strong financial health of the sector … immediate consideration of further resourcing to the sector would be premature.”

Student to staff ratios have risen from 15.6 in 1996 to 20.7 in 2004, with adverse impacts on educational quality.

To sustain and strengthen the quality of university education in Australia, adequate indexation is essential.

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**Student to Staff ratio 1996 - 2004**

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The straightjacket of university financing

Since 1996, universities have been given less discretion to spend the diminished proportion of Government funding that they receive.

In 2003, the Howard Government put a straightjacket on universities when it introduced ‘funding clusters’ on a one-size-fits-all basis.

The allocation mechanisms for university funding, the controls on its use, and the conditions imposed at the whole-of-institution level for receipt of the funds, together act to restrict the flexibility of action universities need.

Government funding conditions restrain rather than promote diversity. They provide no incentives for universities to innovate, to develop distinctive educational packages, or to extend their service outreach to their regional communities. They contribute to the diminution of quality.

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36 Australian Vice Chancellor’s Committee, Student to Teacher ratios, www.avcc.edu.au
The problem of common funding rates

A cornerstone of the unified national system established in the late 1980s was equalising the base funding of universities.

The policy rationale for funding equalisation was to create a ‘level playing field’: “to ensure that institutions are able to participate equally in the unified national system and to provide an equitable basis on which institutions could compete for funds.”37 Institutional uniformity was not the intended policy consequence, but convergence to common aspirations resulted nonetheless.

A common rate of funding was applied across all universities for enrolments in the different fields of education, e.g. Law, Engineering, and Education. Common funding rates were derived from studies of teaching cost relativities by field and level of education. These funding rates were used as a once-off measure in the early 1990s through a relative funding formula to smooth out differences in the funding base of institutions.

Through the 1990s, growth places were allocated to universities at averaged costs, rather than according to the relative funding formula. Universities were able to shift places across fields (excluding very high costs fields like Medicine) on a one for one basis, rather than according to strict cost relativities. In 2003, the Howard Government reverted to the relative funding model approach, but with even tighter control over student unit costs.

Under the Higher Education Support Act 2003, the basic grant paid to Australia’s universities comprises the ‘Commonwealth contribution amount’, and the ‘student contribution amount’. All universities are paid the same ‘Commonwealth contribution amount’ per full-time equivalent student, for a given field of undergraduate education, irrespective of any of the following factors:

- Differences in the use of facilities and services by full-time, part-time, and external and ‘mixed-mode’ students;
- Regional differences in the costs of delivery;
- Teaching of particular disciplines of local or national significance;
- Differences in the socio-economic and cultural background of students;
- Differences in the intake quality of students;
- Differences in student progression rates;
- Differences in the standards of learning;
- Differences in the quality of scholarship and research of academic staff.

A program of mediocre performance receives the same level of funding as one with a better performance record.

The Government has been aware of these anomalies which make necessary a change in policy approach. The 2002 Ministerial Discussion Paper Higher Education at the Crossroads noted the following “pressures and tensions”:

“The Commonwealth’s funding contribution to public universities through operating grants is based on student numbers and common values per student. However, cost structures vary according to an institution’s location, scale of provision and student characteristics. Several universities have significant historical advantage in terms of their assets yet this is not taken into account when funding is allocated. Universities are generally expected, and particularly those in regional areas, to perform a community service role but they are not funded explicitly for this purpose. Universities have been encouraged to focus on their strengths for both efficiency and quality improvement purposes. However, the current ‘one-size-fits-all’ funding arrangements tend to normalise institutions and provide few incentives to encourage innovation and differentiation.”

Alongside inadequate public investment, the failure of policy settings to address these differences is at the core of Australia’s higher education predicament.

This straightjacket means that Australia’s universities simply have no incentive for diversification of their missions.

Moreover, the policy incentives discourage responsiveness to changing circumstances, and the policy signals are confusing and frustrating for universities. For example, a university can be penalised for under-enrolling or over-enrolling against its projected student numbers in ‘funding clusters’, yet it cannot move places from one campus to another, or from one semester to another, or open a new course or close a course for want of student demand, without central government approval.

The particular problem of ‘funding clusters’

Under the Higher Education Support Act 2003 (HESA) the ‘Commonwealth contribution amount’ per student place is allocated on the basis of funding clusters.

The cost relativities, on which the funding clusters are based, derive from a 1990 study updating the weights used by the Commonwealth Tertiary Education Commission in 1983.

The HESA weights have little if any meaning now because (a) the technologies of teaching have changed markedly over the last 20 years, (b) the Government has mixed the cost weights with the differential rates of HECS introduced in 1997, and (c) HECS rates have been partially deregulated since 2003, theoretically from zero to 125%.

The following table shows the changes to the relativities of the government funding clusters over the twenty year period (1990 humanities being the base of 1).

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**Government Funding Weights for Undergraduate Teaching**  
*(comparisons by common discipline groups, 1983, 1990 and 2005.)*

<table>
<thead>
<tr>
<th>Discipline Group</th>
<th>1983</th>
<th>1990</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law</td>
<td>1</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Economics</td>
<td>1</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Humanities</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Education</td>
<td>1.2</td>
<td>1.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1.5</td>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>Nursing</td>
<td>n.a</td>
<td>1.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Engineering</td>
<td>2.5</td>
<td>2.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Science</td>
<td>2.5</td>
<td>2.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Pre-clinical Med</td>
<td>2.5</td>
<td>2.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Dentistry</td>
<td>2.9</td>
<td>2.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>4.6</td>
<td>2.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

In 2004, the Government allowed universities to raise HECS rates by up to 25 per cent on top of the differentiated upper levels. To set the price caps, it was necessary to draw up a schedule of permissible upper limits. National Priority courses (nursing and teaching) were quarantined from HECS rate rises. The schedule of fees for the *student contribution amount* covered 4 HECS bands. The *Commonwealth contribution amount* covered 12 ‘funding clusters’.

This basic teaching grant component paid to universities by the Government, the *Commonwealth contribution amount*, was enshrined in the *Higher Education Support Act 2003*, and is administered under guidelines for the Commonwealth Grants Scheme.

<table>
<thead>
<tr>
<th>Funding cluster</th>
<th>Commonwealth contribution *</th>
<th>Student contribution (HECS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law</td>
<td>$1,573</td>
<td>$0 – $8,170</td>
</tr>
<tr>
<td>Accounting, administration, economics, commerce</td>
<td>$2,589</td>
<td>$0 – $6,979</td>
</tr>
<tr>
<td>Humanities</td>
<td>$4,363</td>
<td>$0 – $4,899</td>
</tr>
<tr>
<td>Mathematics, statistics</td>
<td>$5,163</td>
<td>$0 – $6,979</td>
</tr>
<tr>
<td>Behavioural science, social studies</td>
<td>$6,927</td>
<td>$0 – $4,899</td>
</tr>
<tr>
<td>Computing, built environment, health</td>
<td>$7,716</td>
<td>$0 – $6,979</td>
</tr>
<tr>
<td>Foreign languages, visual and performing arts</td>
<td>$9,488</td>
<td>$0 – $4,899</td>
</tr>
<tr>
<td>Engineering, science, surveying</td>
<td>$12,842</td>
<td>$0 – $6,979</td>
</tr>
<tr>
<td>Dentistry, medicine, veterinary science</td>
<td>$16,098</td>
<td>$0 – $8,170</td>
</tr>
<tr>
<td>Agriculture</td>
<td>$17,113</td>
<td>$0 – $6,979</td>
</tr>
<tr>
<td>Education</td>
<td>$7,613</td>
<td>$0 – $3,920</td>
</tr>
<tr>
<td>Nursing</td>
<td>$10,176</td>
<td>$0 – $3,920</td>
</tr>
</tbody>
</table>

(* includes funding conditional on compliance with Workplace Relations and Governance Requirements)

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40 Department of Education, Science and Training, unpublished data.
The levels for the ‘Commonwealth contribution amount’ are more than a reference point for Government funding; they are the set amounts for the Government’s purchasing of student places from ‘higher education providers’ in ‘funding clusters’.

These amounts are for subjects within a degree, not for whole degree programs. So if a student enrolled in a BSc takes, in addition to Science subjects, say, 1 unit in Statistics, 1 in Environmental Law, and 1 in Accounting, then the amount paid to the university for that ‘study load’ will reflect the different ‘funding clusters’ amounts for that student’s choices in that year.

It works in the same way for a nursing student who may take some science subjects, as for a Law student that may take some foreign language courses.

All the subject choices are then aggregated to determine the amount the Commonwealth should pay the university for that year.

A university is required to advise the Department in advance the annual total number of study loads for each of the funding clusters. This advice includes the potential subject choices of prospective students still in Year 12 at the time the university has to tell the Department what subjects those students will be taking. This requires university to engage in a complex hypothetical to establish a projection of student load.

Funding payments are made to the university on the basis of projected number of funding cluster study loads. The university is subject to penalties if the actual profile of students’ subject choices deviates from its projections.

This funding straightjacket is at the core of the rigidity and inflexibility of current university operations. It has been locked in law by the Howard Government.

It was designed to promote ‘pricing flexibility’ of HECS, but it was a failed experiment. Almost all universities charge at the upper permissible limit, thus there is no competition on price. All the funding clusters do is to stifle flexibility and induce uniformity.

**The need for a more sensible and balanced approach**

Australia’s extraordinarily detailed, complicated and unnecessarily intrusive approach to input funding of universities contrasts with sensible practice elsewhere. The former Commonwealth Tertiary Education Commission used discipline cost weights as part of a broader formula that took account of a variety of institution-specific factors, and then exercised judgement in considering the needs and circumstances of each institution. That continues to be the practice of the Higher Education Funding Council for England.

The English ‘core-plus-margin’ approach provides universities with a higher level of predictability and flexibility, and a lower compliance reporting burden, than the Australian ‘funding clusters’ approach. The English approach is based on a principle of ‘similar resources for similar activities’ rather than ‘the same resources for the same activities’.42

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42 Higher Education Funding Council of England.
English universities are not funded directly on the basis of fixed funding rates per subject, as in Australia. Rather, estimates are made of cost relativities for subject groups with broadly similar costs, and these estimates are used as one of the inputs for calculating the ‘standard resource’ for a university.

In the English funding method, a level of ‘standard resource’ is calculated for each institution each year, reflecting the number of students it has, the mix between different subject areas, and a number of institution-related cost factors. This is a notional calculation of what the university would get if the grant was calculated afresh each year. The ‘standard resource’ calculation is compared annually with the actual amount of funding received by the university. If the actual amount exceeds the standard amount by a tolerance of more or less than 5 per cent, an adjustment is made to the base funding for the university, rolled forward to the next year.

This method allows the universities flexibility in the nature of the provision they offer students (e.g. in terms of course content, staffing structures and methods of delivery) and in varying the mix and volume of student numbers without financial implications in that year.

The English method has the further advantage, over the current Australian approach, of recognising institution-specific cost factors and mission differences. These currently take the form of ‘premiums’ or loadings, such as for location, students from disadvantaged backgrounds, and part-time students.

The four English cost groups and their cost weights are:

a) The clinical stages of medicine and dentistry courses and veterinary sciences – cost weight 4;

b) Laboratory-based subjects (science, pre-clinical stages of medicine and dentistry, engineering and technology) – cost weight 1.7;

c) Subjects with a studio, laboratory or fieldwork elements – cost weight 1.3;

d) All other subjects – cost weight 1.
2. Research and research education

2.1 Background and current position

Research higher degrees continue to be tuition free and fully subsidised, rather than HECS liable. The policy rationale for this level of subsidy is that without it there would be insufficient students prepared to undertake higher degrees, and without them Australia would fall off the pace of knowledge advancement.

The funding for research education and related infrastructure is allocated via performance-based formula, including research income, publications and student/graduate numbers. The volume of research publications has multiplied rapidly as a consequence, and several universities that did not receive additional funds through the formula, increased their higher research degree places through internal cross-subsidies. Concerns have been raised about the quality of research education in a number of Australian universities.

From 2001, the Howard Government expanded funding for research in universities and public research agencies. However, as this was the only source of growth in public funds, and with research income being heavily weighted in the formula for allocating places for research education, all universities made efforts to grow in research. These pressures placed unreasonable expectations and burdens on those universities with limited research capabilities. Concerns have arisen about the quality of research, and its use and usefulness.

2.2 Insufficient scale of research capacity

Australia lacks internationally competitive scale capability, both in the capacity of research infrastructure and the critical mass of expertise. Lack of sufficient concentration puts Australia increasingly behind our competitors.

Australia has been reluctant to make investments in research capacity above $10 million, when $50-100 million is the international norm in new fields of research such as nanotechnology and advanced materials.

The PMSEIC Working Group on Asia has highlighted continuing inadequacies in Australia’s investment in research infrastructure on a scale to enable Australia to be internationally competitive in research:

“The universities need substantial funding to address their global competitiveness and capture opportunities. They need this funding to build world class infrastructure to attract the best researchers in their field…”43

At the wider level, even though AARNet II has built a specific capacity for university-based research, Australia's broadband penetration continues to lag, with its OECD

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broadband penetration ranking slipping from 13 in 2000 to 23 in 2005. Broadband access among Australian internet households rose from 1.5 per cent in 2001 to 25 per cent last year. Meanwhile, South Korea moved to 87 per cent and Belgium and Singapore leapt to more than 65 per cent. Most Australians only have access to services that are not even considered broadband in most countries. Beyond the campus communication networks, the ability of Australian researchers to keep pace is undermined by inadequate infrastructure.

Labor has announced that we will invest in a joint venture with telecommunications companies to build a super fast broadband network that delivers speeds up to twenty five times faster than those available in Australia today.

2.3 Uneven quality of research education

The main benefit for Australia, in getting the allocation of resources for research education right, is the production of higher degree research graduates (Masters by research and PhD graduates) whose depth of understanding and skills contribute to Australia’s knowledge capability, economic competitiveness and community wellbeing.

Quality research education depends on a range of conditions: how students are selected; how well they are motivated; how well they are guided in topic selection; how well they are supervised; the quality of interaction and feedback they receive; the personal support they receive when they need it; the availability of coursework to broaden their skills; high quality research infrastructure; and how well they are examined.

However, nothing can compensate for the quality of the research culture of the institution providing research education. It is the essential ingredient. It is impossible to have a quality research education environment in an institution that is not performing research at high standards.

The distribution of (HECS-exempt) places for research education students is determined by a formula that takes account of university performance in winning research income, publishing research papers, and improving graduation rates. Arguably, some of the formula components are proxies for quality, in particular, a proportion of research income reflects success in national peer-reviewed competitions for research funding. Another proportion of research income reflects the willingness of governments and enterprises to invest in research in a particular university. Such decisions may reflect location preference or convenience or lack of information about alternatives.

Research output volume is not necessarily an indicator of quality. Some journals are less rigorous than others, and some articles have greater impact on scholarly thinking than others. Additional information such as citations impact data, is needed to inform the assessment of output quality.

Student completion volume also is not necessarily an indicator of quality. Practice varies across universities in terms of selection of candidates for graduate studies,
selection of supervisors, topic difficulty, quality of supervision, and methods of examination. A formula that rewards completions without checks on quality can promote perverse outcomes.

2.4 Lack of research quality evaluation

The funding of research education and research infrastructure is determined by quantitative indicators, and is not informed by evaluations of the quality of research performance.

The competitive grants schemes operate on the basis of peer review, with the large majority of peer assessors being Australian researchers. The standards of Australian research are not subject to systematic international peer evaluation. As other countries increase their investments in research capability to underpin their economic competitiveness, Australia does not know how well we are staying with the pace, or moving ahead, or slipping back in different disciplines. It is possible that scarce resources are being allocated to research that is falling off the pace, and to research education places in areas that cannot provide a quality research environment. Australia cannot afford that waste.

Concerns about the current approach in Australia

The Government is considering a ‘research quality framework’ in an effort to obtain qualitative information about Australian university research and its ‘impact’. The Expert Advisory Group for the Government’s Research Quality Framework has used the British Research Assessment Exercise (RAE), an approach to research quality assessment about to be abandoned in the UK, as the basis for an Australian model.

The current proposal for an Australian version of the RAE has itself been assessed as “fundamentally flawed, both in design and operation”.44

It is seen to suffer four major deficiencies:

i. research output is not the direct object of quality assessment;
ii. the assessment panels are too thin to do the job credibly;
iii. the assessments lack output volume measures;
iv. the approach to the assessment of ‘impact’ is too underdeveloped to be included.

The lack of independent, external evaluation of the quality and impact of Australian research is problematic. Investment cannot be well directed when it is not well informed. The community cannot be confident that its investment is worthwhile without evidence that it is.

Lessons from the British Research Assessment Exercise

An express purpose of the RAE was to concentrate research and raise the international standards of British research. The Higher Education Funding Council for England has reported findings of overall improvement in research quality; increased concentration of research and research training; identification of some high quality research in the new, post 1992, universities; improved dissemination of research results; and higher rates of publication in quality journals. 45

Independent evaluations of the RAE challenge a number of those findings. Publication became the end rather than dissemination, with a proliferation of new journals. Once departments and universities were able to identify the criteria for achieving appropriate standards they were able to organise their activities and presentations – a rapid rise in ratings for all was predictable. Universities learned ‘gaming’ tactics – recycling previous work for different journals; dividing a single piece of research into several articles; individuals adding their own names as joint authors, irrespective of contribution; offering speculative or unfinished work in the guise of completed research; going into print too early with mediocre work.46

The relationship of RAE assessments to funding allocations has also been the subject of criticism. The weights assigned for resource allocation were arbitrary. Differences between rating levels were not equivalent,47 and performance could not be mapped to payout across the funding councils.48 Additionally, weak areas were propped up by universities, teaching suffered,49 some poaching of researchers took place, and there was increased stress and lower collegiality,50 and high compliance costs. The consequences for innovation were also adverse, as there was a tendency to publish more academic theory and less for the professions:

“There is disquieting evidence that the RAE’s have reinforced academic traditionalism in research, often in the very areas where it ought to be lessened, have discouraged new developments and interdisciplinary work, and have isolated researchers from practitioners.”51

2.5 Threats to the independence of the ARC

In 2005, the Government appointed three lay members to the Australian Research Council’s ‘Quality and Scrutiny Committee’. For the 2006 round of ARC grants, the then Minister indicated that he had vetoed a number of grants against the recommendation of the Quality and Scrutiny Committee. The Minister’s decisions, and the reasons for them, were not made public. The lack of transparency casts doubt on the reliability and quality of the ARC’s peer review system.

The ARC Board has been abolished and replaced with an ‘executive management’ structure. There are legitimate concerns within the university community that the appointment of the ARC’s Chief Executive and all committee members by the Minister without taking advice from the Board could compromise the integrity and independence of the ARC’s decision-making processes.
3. Innovation

3.1 The erosion of Australian competitiveness

Universities are essential to raising the level of innovation in the economy. They produce skilled graduates and researchers, and are a source of expertise, new ideas and technology. Universities can be deeply engaged with industry in boosting competitiveness and growing exports and jobs.

The Government has failed to utilise universities’ capacity to address market and industry problems.

Australia’s current account deficit will hit a record $60 billion in the next year. Australia has one of the highest levels of foreign debt in the world at half a trillion dollars.

Many critical industries lack the scale to compete globally. Severe skill shortages are already constraining the economy, and the emerging wave of baby-boomer retirements will exacerbate difficulties into the future. As a result our economic competitiveness has suffered.

The threat from China, India and emerging Asian economies cannot be underestimated, especially as they are changing gear from being low-skilled and low-wage economies to ones that are investing in education and research to high-skill and high-technology exporters.

Australian exporters have lost one-fifth of global market share since 2001. Elaborately-transformed manufactured exports actually declined in 2002, 2003 and 2004. Key manufacturing areas such as iron and steel, transport equipment (excluding road vehicles), and telecommunications equipment are going backwards. Although the services sector is the largest employer in Australia, service exports have also declined since 2000.

Declining market share has been a common experience for industrialised OECD economies as emerging producers (especially China) make their marks. China’s cheap labour market and vast investment in research, training and infrastructure pave the way for future global dominance in simply-transformed and elaborately-transformed manufactures.

China reported 644,106 degrees in engineering, computer science and information technology for 2004 while Australia reported 31,049 in 2003. In India, over the past decade, enrolment in higher education institutions rose from 4.9 million to 9.9 million, science degree holders rose 60 per cent and the number of science postgraduates rose 50 percent. In 2004 India produced an estimated 215,000 engineering graduates.

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52 BIS Shrapnel, Economic Outlook, June 2006.
53 BCA, Benchmarking Reform Action: BCA Budget Submission 2006-07, p. 11.
54 ABS, Balance of Payments and International Investment Position, Australia, March 2006, Cat 5302.
One key difference between Australia and other developed countries is that many of them, especially in the European Union and North America, are taking drastic action to reverse declines by intensifying their investments in innovation. The United States’ “American Competitiveness Initiative” involves an extra $137 billion over 2007-2016 for Federal research and development. The European Union has established a research funding target of 3 per cent of GDP.\textsuperscript{57}

3.2 Limited culture of innovation

Innovative activity is falling across many industry sectors.\textsuperscript{58} It is no coincidence that our export share is declining at the same time. Only one-third of Australian businesses engage in innovation activity aimed at producing new and improved products and services. Only one-third of innovating businesses – or 11 per cent of all businesses – undertook some research and development.

Australian business, particularly small- and medium-sized enterprises (SMEs) lack the scale and depth not only to compete internationally but also to absorb ideas, research and technology – that is, to innovate. Most businesses believe that they cannot afford to innovate.\textsuperscript{59} As a mainly branch-plant economy in respect of global corporates, and with a high proportion of economic activity undertaken by SMEs, the apparent research and development (R&D) contribution to Australia’s economic performance is below that of many other nations.\textsuperscript{60} Australian business expenditure in research and development languishes at 0.89 per cent, 18\textsuperscript{th} in the OECD. Finland, also an SME-based economy, albeit with extensive government support for innovation, ranks first with business R&D expenditure at 2.45 per cent of GDP.

The limits to Australian receptor capacity in respect of innovation and research and development are obvious in the make-up of our export market. For example, fewer than 200 Australian firms export more than $100 million per year. Over 16,000 Australian firms export less than $100,000 per year. Although these firms are mainly small and medium-sized enterprises, they have made the conceptual leap of exporting, but lack the expertise to grow.

Australia lacks a mechanism for helping businesses to become more receptive to innovation, such as facilities to develop new products and processes at the pre-market readiness stage. We lose great ideas and inventions overseas because we lack adequate design and testing, simulation and fabrication facilities and applied research services to support Australian businesses.\textsuperscript{61} The Federal Government’s National Collaborative Research Infrastructure Strategy paper warns:

\textsuperscript{57} Stephen Allott, “From Science to Growth,” 2006 City Lecture, Hughes Hall, Cambridge University, 6 March 2006; FASTS press release.
\textsuperscript{58} 34.8 per cent of Australian businesses engaged in innovation activity in 2001-03 in Manufacturing, the proportion of businesses innovating fell from 41.7\% in the period 1991-94 to 39.5\% in the period 2001-03. ABS Innovation in Australian Business, 8158.0.
\textsuperscript{59} ABS Innovation in Australian Business, 8158.0.
\textsuperscript{60} National Collaborative Research Infrastructure Strategy, Strategic Roadmap, February 2006.
\textsuperscript{61} National Collaborative Research Infrastructure Strategy, Strategic Roadmap, February 2006.
“Scale-up and prototype facilities are not available in any Australian research organisation, and are needed to enable research in advanced materials to move from the laboratory bench into useful applications…Australia has very limited capacity to rapidly make prototypes for testing and further research of bio- and chem. advanced materials…the national infrastructure for micro/nano fabrication is scattered, uncoordinated, patchy and generally lacking critical mass.”

3.3 Skill shortages limiting innovative capacity

Collaboration in adapting ideas and developing new products requires a steady supply of graduates who are appropriately skilled to assist business. However graduates in sciences, engineering and technology are in short supply. Australian higher education graduates in the sciences, engineering and technology represented 19 per cent of all graduates in 2001 compared with 25 per cent on average for OECD member countries. The PMSEIC Working Group on Asia has warned:

“The prognosis is alarming. Significant skill shortages are occurring in the science, engineering and technology (SET) fields… Not only do we not have the capacity to improve our position as a knowledge economy, our ability to sustain our current position is doubtful.”

Skill shortages in Australia are predicted to worsen in the face of declining or stagnant enrolments in science and engineering at all levels of education. In higher education, domestic enrolments in science, engineering and technology courses as a proportion of total enrolments, have declined from 15.8 per cent in 1989 to 14.0 per cent in 2004.

The current Government has turned 300,000 people away from TAFE colleges, while bringing in 270,000 extra permanent skilled migrants.

There are shortages, too, in science, engineering & technology researchers with losses from retirement and mid career attrition. At the same time, demand for skills in engineering and the enabling sciences resulting from global economic development is increasing. There are even signs of skill shortages in technology and engineering in China and India. Skills shortages will be exacerbated in the near future due to a rapidly ageing populations and an alarming decline in high school students studying sciences and mathematics.

In addition, labour productivity is at an 18-year low and falling, even though Australians work some of the longest hours in the developed world. Additional gains in labour productivity will be achieved through innovation, not lower wages or increased working hours.

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63 ABS, Education and Work 6227.0, various years.
64 Department of Immigration and Multicultural Affairs, Population Flows: Immigration Aspects, various years.
65 Sydney Morning Herald, ‘Clever Country poised to bring jobs home’ 11 January 2006.
66 Labour productivity fell from an annual rate of growth of 3.2% over 1993-94 to 1998-99, to 2.2% over 1998-99 to 2003-04 and was 1.3% negative in 2004-05. Multifactor productivity fell from an average annual growth rate of 2.1% over the first cycle to 1.0% in the second cycle, and was 1.7% negative in 2004-05. Productivity Commission, presentation to Productivity Perspectives 2006.
Businesses nominate employing skilled people as the single most frequent way to innovate within the enterprise. A recent survey undertaken by the Australian Industry Group highlights the importance of skills to competitiveness, and the severity of the skills deficits across Australia. 85 per cent of companies nominated the building of their skills base as critical to their competitiveness, whereas 74 per cent identified the inability to secure skilled staff as a barrier to success over the next three years, ahead of all other factors.

3.4 Australia’s innovation mediation gap

As well as limits in the structure and capacity of firms, Australia has another gap in the national innovation system. Whereas the US has Battelle, Germany has the Fraunhofer-Gesellschaft institutes, the Netherlands has TNO centres; Taiwan has the Industrial Technology Research Institute of Taiwan (ITRI), and Finland has the Finnish Funding Agency for Technology and Innovation (Tekes) and Research Findings Transfer Service for SMEs (TUPAS), as competent not-for-profit intermediaries between industry and research institutions, Australia lacks a brokering capability to connect research with the market.

In particular, Australia lacks a mechanism for helping businesses develop new products and processes at the pre-market readiness stage. We lose great ideas and inventions overseas because we lack adequate design and testing, simulation and fabrication facilities and applied research services to support Australian businesses.

3.5 The failure of current innovation policy

The Federal Government’s approach to innovation is failing to address the barriers that Australian industries face in competing on the world stage. Backing Australia’s Ability (BAA I & II) reflects an incomplete innovation model. A key assumption of the BAA approach is that innovation begins with commercialisation of knowledge supplied by public research institutions. The prevailing evidence suggests that this is not the case. At present, only 5 per cent of Australian businesses use research results to innovate and only 1 per cent employ researchers or academics.

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67 ABS Innovation in Australian Business, 8158.0.
69 National Collaborative Research Infrastructure Strategy, Strategic Roadmap, February 2006.
71 Innovation was defined as introducing new or significantly improved products and/or implementing new or significantly improved processes.
International evidence indicates that innovation occurs differently in different disciplines.

“there are some clear differences in the impacts of public research across industries. In this regard, the pharmaceutical industry stands out as an anomaly along many dimensions. There is no other industry where public research – and particularly basic science (i.e. biology) is thought to be so relevant...the linear model may characterize the innovation process better in this industry than others.”

Innovation is largely industry-demand driven rather than knowledge-supply driven. An over reliance on ‘knowledge-push’ has meant that the tail has been wagging the dog. Businesses innovate in order to address specific demands from customers, to stay ahead of competitors and to expand market share. While many universities and public institutions are engaged with industry on solving everyday, market problems, most of these collaborations are ad hoc and unsupported by a cohesive Government innovation framework.

The Government’s narrow focus on a ‘knowledge-push’ approach has the potential to distort the fundamental role of universities by pressuring them disproportionately to push their research into the market. This pressure can lead to research being overly oriented to short-term gain, and possibly to conflicts of interest.

It is also clear that the Government has failed to support universities to develop their research into commercial patents, licenses and spin-off companies. Australian commercialisation activity lags behind countries such as the United Kingdom and the United States.

In 2002, 319 patents were issued to Australian universities. They earned $80 million in licensing income, and spent $18 million in legal fees for protection of intellectual property. The $80 million gross earnings compared with $4.5 billion of research expenditure, yielded returns of 1.8 per cent on average of research investment. Those returns compare with 3 per cent in the United Kingdom and 6 per cent in the United States.

In 2002, three universities accounted for 82 per cent of total university adjusted gross income from licenses, while three CRCs accounted for 87 per cent of CRC adjusted gross income from licenses. 10 universities and 30 CRCs did not report making any patent applications in 2002 and 20 universities, and 38 CRCs did not report having any patents issued.

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3.6 The need for a new approach

The Business Council of Australia (BCA) has called for an overhaul of long-established assumptions on how businesses innovate. The BCA argues that government policy must acknowledge that innovative activity extends across all parts of a business – it is not confined to research work. Innovation, in some circumstances, has more to do with human capital than with technology and invention. Getting the supply and quality of graduates and postgraduates with science and business qualifications right is critical.75

The BCA has highlighted several specific deficiencies in the current innovation policy framework:

- The poor state of the nation’s infrastructure inhibits business operations in Australia;
- Australia’s regulatory framework induces compliance rather than encourages entrepreneurship;
- R&D tax concessions are too restricted to science-based innovation;
- Deficiencies in the quality of graduates of universities and technical training colleges impede the building of enterprising capabilities in firms.

In a recent report on Australian innovation, the Committee for Economic Development of Australia (CEDA) has also called for a more realistic and comprehensive approach to policy, based on the understanding that Australian innovation needs to occur through productivity improvements in existing firms in established industries, such as agriculture, engineering, food, wine and vehicles at least as much as by the creation of new firms in new industries like ICT, nanotechnology or biotechnology.76

It is clear that we need a new approach to innovation urgently. Investment in innovation must support business to find and adapt new ideas and research, take up new technology, and test new products and processes.

76 CEDA, (2006), Growth 53: Innovating Australia.
PART II – POLICY PRINCIPLES & PURPOSES

4. Labor’s principles for higher education and research

Higher education and research are important contributors to productivity and innovation, and underpin national economic competitiveness. Labor’s policies are aimed broadly at enhancing personal achievement, community wellbeing, social cohesion and security. They also help to sustain our democratic freedoms.

Educational standards

- Verifiable, high quality standards of the educational attainment of graduates with Australian higher education qualifications
- High standards for institutional and course accreditation

Student participation and access

- Year 12 equivalent plus a post-secondary qualification as the new minimum expectation of labour market readiness for new entrants
- Post-initial (tertiary) qualifications as an increasing expectation of continuing workforce participation
- Equitable opportunities and choices for higher education, for school leavers and adults, including second-chance access
- Particular support enabling Indigenous students to participate successfully
- Fair and affordable (publicly subsidised) access across universities and TAFE colleges (including loans support for higher education tuition costs)
- Merit-based (not privilege-based) entry into universities
- Income support for students in financial need
- Loans support for students enrolled with accredited private providers of higher education awards

Higher education system

- Australian universities must perform at internationally recognised standards of excellence.
- Universities that are actively engaged with the Australian community.
- A more diversified higher education system, with each institution focusing on what it does best
- Institutions responsive to student demand and labour market change
- The ability of all academic staff to sustain scholarship in their fields and participate in the development and/or application of research
- All universities will be better off under a Beazley Labor Government

Adequate government funding without micro-management

- Adequate indexation of university operating grants, linked to quality improvement
- Reduced Government interference in the internal management of universities.
High Quality Research that advances Australia

- Access of Australian researchers and students to world-class research facilities
- High quality research performance at internationally-benchmarked standards
- Demonstrable application and impact of research

Working together with shared responsibilities

- Cooperative inter-governmental relations
- Consultative approach involving industry and community interests
- Government partnership with universities.

Putting the principles into practice

Labor is committed to increasing public investment in higher education and research. The proposals set out in this white paper should be understood in the light of this commitment.

Labor recognises the dynamic and competitive nature of the contemporary environment for higher education, research and innovation. In this environment, policy needs to be clear and coherent, to signal core values and strategic directions, while being set in a framework that provides choice for students and flexibility for institutions. The formation of policy today requires finding the right balance between competing pressures and interests.

4.1 The balance of private and public benefits

A balanced policy framework is one that acknowledges that higher education confers economic and social benefits to individuals and the community, and that higher education investment involves a sharing of public and private responsibilities.

Relative to non-graduates, on average, graduates obtain higher earnings than those without degree qualifications.77 Higher education graduates are less likely than others to be unemployed and their period of unemployment is more likely to be shorter.78 Graduates also tend to have greater flexibility for occupational mobility and adaptation to changes at work. In Australia, full-time employed graduates receive a wage premium over non-graduates on average of the order of 65% (controlling for age, experience and other factors). About 80% of the increment is attributed to the effect of higher education.79

There are considerable public economic benefits from higher education, as well as powerful economic contributions of university research. The return to the Government from investment in higher education (revenue attributable to graduates less outlays on

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77 Graduate Careers Council of Australia, 2004, Graduate destinations 2004
Building our Future in the World

higher education) has been estimated at 11% positive. That is, the Government gets back more in taxation revenue (including HECS repayments) from graduates than it spends on higher education.

Higher levels of educational attainment help raise levels of productivity and sustain economic competitiveness. A tertiary educated workforce is more adaptable to structural change, and better able to contribute to problem solving and innovation in the design and application of new products and processes.

Higher education also confers a range of non-economic benefits, including personal health and social opportunities. Highly educated societies tend to have lower rates of social dependency and crime, and higher rates of acceptance of cultural diversity.

Higher education has become a major generator of Australia’s fourth largest export industry in education services that contributes some $7.5 billion annually. International higher education builds networks of influence and positions Australia as a regional education hub. International higher education is an important stimulus to a modern economy through skilled migration, trade links and innovation.

4.2 The special role of public universities

A university is more than a provider of education and training services.

Contemporary Australian universities play several roles. They provide qualifications and access to careers. They offer educational experiences and intellectual training. They are places for scholarly work and sources of expertise. In varying ways, they expand and transfer knowledge, engage with and contribute to their communities, and are internationally networked. They have a special capacity to connect expert and lay views and, through dialogue, enhance innovation and citizenship.

An important role of contemporary universities is to encourage and enable students to examine complex, evolving situations where competing values may be at stake, to employ substantive knowledge and moral reasoning to evaluate the issues involved, and to form their own judgements for appropriate action.

80 Borland et al (2000); estimates based on 1997-98 data; outlays of $5.3B, revenue of $8B.
It is also important for students to learn to value and respect cultural differences. Universities have new responsibilities to prepare students for their role as global citizens, including through the internationalisation of learning experiences.

In Labor’s view, universities must continue to provide programs that the society has identified as important, as well as raising those questions and issues that society does not want to address:\footnote{Shapiro, H. T. (2005), \textit{A Larger Sense of Purpose: Higher Education and Society}, Princeton University Press. NJ.}

\begin{quote}
“With all the pressures toward the closing of our minds that come with conflict in the public arena, it’s not a bad idea to have special communities like universities distinctly dedicated to the open intellect.”\footnote{Bollinger, L. C. (2003), “The Idea of a University”, \textit{Wall Street Journal}, 15 October.}
\end{quote}

The implicit social compact with the university

In Australia, public funding of universities by the Commonwealth Government was initiated by Prime Minister Menzies. The 1957 Report of the Murray Commission, on which Menzies acted, had articulated the terms of a ‘social compact’ between the Government and universities:

\begin{quote}
“The days when universities could live in a world apart, if ever they truly existed, are long since over. No independent nation in the modern age can maintain a civilised way of life unless it is well served by its universities; and no university nowadays can succeed in its double aim of high education and the pursuit of knowledge without the goodwill and support of the Government of the country. Governments are therefore bound to give universities what assistance they need to perform their proper functions; but in turn universities are bound to be vigilant to see that they give the services to the community that are required by the necessities of the age.”\footnote{Murray Committee (1957) \textit{Committee on Australian Universities Report}, Canberra, AGPS, p. 91.}
\end{quote}

In today’s language this might be called a statement of mutual obligation – adequate public investment in universities for benefits actually delivered by universities.

The compact between the Commonwealth and universities is no longer expressed in terms of public investment for social benefits. Indeed, the Government no longer funds universities as institutions with broad and diverse missions. Instead we have ‘purchaser-provider’ arrangements for separate services, the major one relating to the supply of undergraduate courses for Australian students – to which the Government contributes less than half of the costs.

Today on a global scale, we face complex new problems demanding new solutions: climate change, rapid urbanisation, water scarcity, pandemics, famine, geo-political tensions and terrorism. The world needs universities to help solve the most complex problems ever faced. Traditionally, universities have variously contributed to intellectual, social, cultural and economic advancement. Never before have universities been so critical to biological survival, social cohesion and humanity.

Contemporary universities also are important economic entities, and higher education contributes to economic growth as an industry. Universities not only continue to play an enabling role in the development of a civil and educated community, but they also
make a direct economic contribution through employment, skills formation, and innovation, and they build capacity and networks for regional economic integration.

Australia must boost productivity and innovation to sustain economic competitiveness. We look to our universities to produce graduates and knowledge, and to create and apply technologies, to underpin improvement in national economic performance. Yet the universities are discouraged and under-resourced to contribute to the best of their capabilities.

4.3 Constructing a balanced policy framework

The current policy approach of dealing with problems on an ad hoc basis is not sustainable. The existing policy framework, although in place for only three years, lacks coherence. Stifling controls on student enrolments, and intrusive regulation of internal matters that are the proper and legal responsibilities of university governing bodies, together with ambiguities of policy signals and contradictory incentives, are causing confusion, misdirected efforts and inefficiencies.

The status quo is unsustainable. Three options arise:

- Should we return to a stronger planning approach to higher education development?
- Should we go to a full market-driven approach governed only by corporate regulations?
- Or is there a workable, middle course for policy that promotes the benefits of competition for individuals and institutions, and ensures that the broader community gains from higher education?

The Planning Option

In Labor’s view, it is not possible or desirable to return to predominantly public funding and central government planning of universities as outlined in the Dawkins’ White Paper. Not only is it not affordable, it is not a sensible policy direction for Australia’s future, which will face intensifying global competition. Many higher education systems around the world are adapting more flexible policy frameworks and engaging with international markets. A central planning framework would be even less fit for the future than it was for the past.

The new realities of higher education in Australia and internationally call for new ways of thinking about the relationship between higher education institutions, markets and the Government.

The full market option

In large measure, markets in higher education are operating and are here to stay. Labor’s policy approach is pro-competitive. Arguably, there are areas where the ‘business of higher education’ is no different from, say, the business of consulting on legal, financial or other technical and professional matters. However, treating higher education entirely as an industry in the market for services, akin to banking, tourism,
transport or communications would neglect the important contribution higher education makes to the Australian economy and society.

The markets in higher education do not function independently of Government policy. It was policy change that opened up their operation in Australia. Incremental shifts in the policy settings have enabled widening of market operations over the last decade, but something is basically wrong. Current policy settings constrain market operations, by limiting the flexibilities of universities, without effectively protecting the public economic and social benefits of higher education.

Having regard to the national interest, the fully open market option carries risks of widening inequalities in access to, and outcomes from, higher education, and deterring the next generation from investing adequately in their human capital, at a time when Australia needs to ensure there is no under-investment in the skills needed to boost productivity.

There are also risks that relatively footloose private providers with low overheads could cherry-pick the most profitable market niches, offering at least comparable quality to that of comprehensive public universities, at better prices and with better service. It could render a number of public universities unviable, or at least unable to cross-subsidise and, hence, maintain their more expensive offerings. Some may seek to divest themselves of various functions, including courses and campuses. Others might seek to merge with other institutions, including private and foreign institutions. Some might seek to corporatise.

Alternatively, the vulnerable public universities may be forced through community pressure to continue the supply of costly programs that others will not provide and, without cross-subsidies from more lucrative areas, having to do so at lower standards of quality. Full market functioning in higher education would also intensify prestige-based competition. While that is happening already, through the expansion of information for prospective students, and the proliferation of international and national league tables, it can be expected to have a more potent effect on student demand for some institutions in a more market-based environment.

The full market option raises questions about the extent to which Australians value established public universities, and what they value them for.

- Are they prepared to relegate regional and outer metropolitan universities to official second-class status?
- Are they willing to see the closure of some regional universities and the withering of others?
- Do they want to see the full privatisation of some public universities?

In Labor’s view, the full market option is not a viable alternative. It would create more problems than its proponents assert it might solve. It would promote individual and institutional interests at the expense of broader community needs. It would erode the capacity and incentive for Australia’s universities to contribute to sustainable nation building.
Balancing market incentives to benefit community interests

In Labor’s view there is now a need for policy framework for the future development of Australian higher education whereby public investment complements private investment, and where regulation safeguards quality and promotes innovation. On the one hand, in the more market-driven environment, public policy needs to be concerned about promoting competitiveness, diversifying choices for students, and improving the performance of Australia’s higher education system. On the other hand, contemporary policy must also safeguard the public purposes of higher education and research, which are derived chiefly from our public universities. This custodial purpose of policy needs to function coherently alongside a more market-driven system, and must promote and not stifle diversity.

Whereas institutional mission should determine which new opportunities an individual university chooses to pursue, instead we see many universities pushed by Government policy incentives to misshape their mission to chase revenue.

"Lack of definition harms individual institutions and contributes to the larger sense that “anything goes” in higher education. The point is not that higher education institutions should remain static but that their decisions for new programmatic development should derive from their core values, as well as from understanding their real strengths and capacities as honed by market competition."92

The responses of universities to reduced public investment in higher education reflect the skewed emphasis of current policy towards the private economic benefits of higher education. A broader understanding of the functions of higher education suggests the need for a more balanced approach to policy and financing.

The funding straightjacket imposed on universities by the Howard Government constrains the flexibility that universities need to compete against rivals and to contribute to nation-building.

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PART III - POLICY PROPOSALS

To address the identified challenges and achieve the objectives outlined in the preceding chapters, we propose a new set of policy initiatives. Together the initiatives are intended to:

- Raise the quality of education, research and research education;
- Ensure that all higher education institutions, public and private, meet at least minimum acceptable standards of quality of educational qualifications;
- Expand access, participation and choice for students;
- Improve the responsiveness of higher education institutions to student demand and labour market change;
- Ensure that Australian higher education is internationally competitive, by increasing the flexibility of universities and the diversity of the system;
- Boost the scale of Australia’s research capabilities to more competitive international levels;
- Connect innovating enterprises to the know-how and facilities they need to develop their ideas in Australia for export to the world;
- Promote entrepreneurial skills and reward inventiveness;
- Safeguard the public good interests of higher education and research for the future benefit of Australians.

5. Higher Education

5.1 Higher Education Quality Standards

For Australia to be a competitive country we must have a highly educated and skilled workforce. Higher education plays a crucial role in preparing and developing the intellectual and professional talents of the nation.

The expansion of participation and the competitive pressures under which higher education now operates pose risks to the quality of higher education. The Australian community needs to be assured that our graduates, wherever and however they are educated, are acquiring the capabilities needed so that they can be competitive anywhere in the world.

The sustainability of Australia’s significant education exports industry also relies on the integrity of Australian qualifications.

Considerable progress has been made over the last two decades in defining our expectations of graduate capabilities for each level of qualification in the Australian Qualifications Framework. However, we have not yet developed and applied an evaluative approach to the educational outcomes of higher education.

Labor seeks to focus on the quality of higher education outcomes. The community needs to be assured that every graduate meets at least the minimum acceptable standard of performance identified for a higher education qualification, and to know how well we excel above that minimum.
Improved understanding of higher education outcome quality will lead to continuous enhancement of the quality of the learning experiences of students.

Labor’s commitment to raise the rate at which universities’ operating costs are indexed annually is conditional on the sector committing to raise its standards demonstrably.

To enhance the quality of higher education, and to assure the community of the quality standards of Australian degrees, we have given consideration to several options.

Options

1. One option is a modified form of the status quo; with a greater role for institutional self-assessments and a sharper focus by the national audit agency on factors relating directly to learning and teaching. Such a change has merit and could play a role, but is not sufficient in itself to assure standards.

2. A second option is to place greater reliance on the Graduate Skills Assessment instrument, developed by the Australian Council for Educational Research. That instrument (GSA) was designed to test the extent to which graduates can demonstrate the general attributes that universities proclaim, in their goal statements, that their educational programs are designed to develop in their graduates: critical thinking; problem solving; interpersonal understanding; and written communication.

The GSA could play a role in providing employers with supporting confirmation of graduate skills, but it is a very indirect way of measuring interactive skills of importance to employers, such as teamwork, and may not have sufficient credibility for allaying concerns about the quality of graduate readiness for employment. Since its development some seven years ago, employers have not been pressing for its wider use. Moreover, the instrument is designed to assess ‘generic’ attributes, and while it can be used to compare graduate performance across disciplines, it cannot take account of specific disciplinary understandings and methods of inquiry.

It would be better for each institution to determine any use it wants to make of the graduate test (whether for entry-level or exit-level performance or as an indicator of value added) as part of its armoury of evaluative techniques, rather than to mandate it for the whole sector, and duplicate the assessment pressures on students.

3. A third option is to establish an ‘inspectorate’, along the lines of a previous British approach to assessing the quality of teaching in higher education institutions. Australian culture is generally inimical to that type of approach. It was found wanting in the UK and met much resistance. A more acceptable variant of this option, at least in respect of universities, is one where an institution, either in undertaking a self-assessment, or in responding to the criticism of an external body, invites academic peers and external observers to give the institution an outside view of its performance.

Most universities already adopt such practices. Additionally, professional qualifications are subject to external accreditation. The Education Services for Overseas Students Act gives State & Territory and Commonwealth officials powers to enter premises, inspect activities and seize materials, but these powers are limited to process compliance and do not relate to educational outcome standards.
4. A fourth option is to reinstate the former approach of Discipline Reviews. The experience of that approach was variable in the early 1990s. A couple of such reviews raised serious questions for some universities and led to substantive curriculum reform, e.g. in Law. Others were captured by professional bodies pushing for course lengthening, e.g. Accounting. The disciplinary approach was eventually discarded in favour of whole-of-institution evaluations. However, there is a role for both approaches, as each provides different sets of perspectives.

5. A fifth option is a comparative evaluation of Bachelor Degree Honours scripts and levels of Honours awarded. The Australian Vice-Chancellors’ Committee managed such processes in the past and, apparently, they were well regarded, but they were disbanded with the post-Dawkins enlargement of the university system. The Honours was regarded as the pinnacle of academic performance at the Bachelor Degree level, and the sorting mechanism for entry to PhD candidature. The standards of First Class Honours set the high bar for undergraduate achievement. Comparisons of the quality of theses awarded First Class Honours across institutions and, more problematically, across disciplines, gave an insight into the comparative quality of the Bachelor Degree in general.

The Honours plays a less significant role now, with the adoption of more diverse bases for admission to PhD studies, and in the context of the Bologna Process, may play even less of a role in the future. Private providers of Higher Education services generally do not offer Honours degrees.

6. A sixth option is to review the standards of the PhD, and to require specific external examination requirements for the future awarding of a PhD qualification. The PhD has traditionally been the certificate qualifying a person to practise as a professional academic. Unlike the Honours, it is not awarded on a graded basis. Candidates typically withdraw from rather than fail their PhD, or are advised to take a lesser postgraduate qualification. Before Dawkins, Australian universities generally insisted on external examination of PhD theses, often requiring at least one international examiner. A number also required PhD candidates to defend their theses orally.

Today, a number of universities examine PhD theses fully in-house, and coursework performance is taken into account. Even when they have external examiners, they may draw on individuals who are likely to be less critical than others. Even so, critical feedback may require merely a revision of the text. Academic peer comparisons of doctoral theses would be a very labour-intensive exercise, and in some fields there would be a limited pool of examiners. Private providers of Higher Education services generally do not offer the PhD.

7. A seventh option is to create a new body expressly charged with the responsibility for ensuring that all Australian qualifications are offered at a grade of quality that meets at least a minimum acceptable national standard. Defining the minimum standard, and gaining consent to it, would be a complex task; such a body would, therefore, need to comprise persons of high academic repute, together with representatives of employers who can take a national-interest perspective.

To fulfil its role, such a body would need to rely on institutions internally applying a range of evaluative techniques, including some of those discussed above.
Beyond the Australian Qualifications Framework

The core statement of the Australian system’s expectations of educational achievement is the Australian Qualifications Framework (see Appendix 2). It provides a set of descriptors for each level of award. These descriptors are the result of extensive discussion leading to concurrence among all the interested parties – higher education institutions, employers, unions, professional associations, and State & Territory and Commonwealth governments.

The descriptors define the differences in expected graduate capabilities by level of qualification. However, they do not set a minimum standard of graduate attainment of those capabilities for each level of qualification. Whereas ‘competencies’ are identified in respect of vocational education and training qualifications, and can be demonstrated and assessed in specific contexts, higher order critical and analytical abilities are less amenable to such an approach.

Student performance is marked normally in higher education on a scale usually represented by High Distinction, Distinction, Credit, Pass, and Fail.93 The meaning of a Pass or a credit is not made explicit by reference to observable criteria, although individual assessors have regard to expectations of different standards of performance, on the basis of their experience, when making their judgements of the quality of work. Their assessments can be validated by reference to another marker, such as in cases of a student appeal. However, these matters of judgement are internal to the academic areas of the institutions, and are not exposed publicly.

Australia has developed new ways of evaluating student performance at the senior secondary school level. For instance, the NSW Board of Studies has developed over several years a ‘standards-referenced’ approach to reporting educational achievement. Student achievement is assessed against specified standards of performance that are established for each course. Achievement at the minimum standard is reported as a score of 50. Scores above fifty are related to 5 ‘performance bands’ (50-59, 60-69, 70-79, 80-89, and 90-100). The bands describe the knowledge, skills and understandings of the course of study typically demonstrated by students whose marks place them in a particular band. Illustrations of the performance of students, with scores in the bands above 50, are disseminated to all schools. Teachers, students and parents thereby know what is meant by a score, and what performance improvement is required to gain a higher score. Importantly, they can recognise performance that does not meet the acceptable standard.

Such an approach, appropriately modified, could be developed for clarifying the acceptable standards of student attainment for higher education qualifications. Student work in an academic field could be brought together for consideration by a group of scholarly peers. Examples of work meriting a High Distinction, and those for the other grades, could be agreed and disseminated as points of reference for assessors and students, employers and the broader community. Importantly, this process would build shared understanding and wider confidence of the meaning of marks, and of the minimum standard of performance required to obtain a degree. A systematic approach would require teams of assessors for each educational field of award.

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93 Some universities operate a ‘grade point average’ system.
Preferred Option
Australian Higher Education Quality Agency

It is proposed to create a new Australian Higher Education Quality Agency.

The Australian Higher Education Quality Agency will have responsibility for assessing the standards of learning outcomes across the higher education sector, including all providers public and private offering an Australian qualification.

The policy intent is to develop a dual approach to quality evaluation, referenced to the different purposes of institutions, and referenced to the minimum standards required for Australian qualifications, as set out in the Australian Qualifications Framework.

The ‘fitness for purpose’ approach to quality enables different institutions to pursue their diverse missions.

The ‘minimum standards’ approach guarantees that, for a given level of qualification, graduates will be able to demonstrate the range of academic and vocational attributes identified for that qualification in the Australian Qualifications Framework, at a standard agreed by groups of scholarly peers.

The Australian Higher Education Quality Agency will be created by strengthening AUQA and broadening its remit.

Higher education accreditation and quality audits

The Australian Higher Education Quality Agency will be developed jointly by the Commonwealth and the States & Territories, and will be a body owned and controlled jointly.

Labor will seek the agreement of the States & Territories to have all higher education accreditation approval and compliance assessments undertaken by the national Agency for the purpose of ensuring consistency in the assessment of standards of Australian higher education qualifications.

The Australian Higher Education Quality Agency will have regulatory and enforcement powers, relating to the provision of Australia qualifications, wherever and however they are provided. It will have coverage of all providers operating in Australia, including public universities, TAFE institutions, overseas universities, private providers, and public-private partnerships. It will also have coverage of the standards of all Australian qualifications offered overseas and on-line, and the equivalence in program quality between them and qualifications of the same level offered in Australia.

All providers of higher education qualifications will be required to offer their students the learning experiences and learning resources necessary for them to acquire the knowledge, skills and understandings that their qualifications vouch for. These requirements will include access to library services, and, as appropriate, access to
laboratories. All providers also will be required to provide quality-assured assessment of student learning.

The powers of the Australian Higher Education Quality Agency will include the ability to require an institution or provider, where its educational standards have been found to fail to meet minimum requirements, to:

- make changes to the structure and standards of its awards, to ensure consistency with the guidelines for the award in the Australian Qualifications Framework;
- cease admitting new students to a program or range of programs;
- arrange for the transfer of its current students to other accredited institutions or providers;
- make changes to information about its offerings; and
- do any other thing necessary to safeguard the reputation of Australian qualifications.

The Australian Higher Education Quality Agency will also have powers to revoke the accreditation of a provider to offer a particular course of study leading to an educational award in the Australian Qualifications Framework.

Institutions and providers whose accreditation has been revoked will be identified on the register of bodies authorised to offer awards, lodged with the Australian Qualifications Framework.

The findings, conclusions and recommendations of the Australian Higher Education Quality Agency will also influence Commonwealth and State funding of institutions.

In the case of foreign institutions offering awards outside the Australian Qualifications Framework, the Australian Higher Education Quality Agency will be authorised to verify that the standard of courses offered in Australia meet at least the equivalent standard of courses leading to the same educational qualifications in the home country of the institution. Where an institution is found to fail to meet minimum acceptable requirements, its accreditation to operate in Australia may be revoked.

As higher education institutions and other providers of higher education services will be subject to review by the Agency, they will not be members of it. The various peak bodies for higher education institutions will be invited to nominate members of the Agency, and it will seek their views in designing its policies and procedures.

Institutions will also be given the opportunity to comment on findings and recommended actions before the Agency finalises any reports containing assessments of their performance.

All final reports of the Agency, including comments of institutions and providers to which they refer, will be made public.

In addition, the Australian Higher Education Quality Agency will take the lead for Australia in negotiating collaborative and mutual recognition arrangements, and information exchange, with other countries and meta-national bodies (such as the
Higher education standards reviews

It is proposed that the Australian Higher Education Quality Agency will undertake a rolling program of annual education standards reviews by field of education. The Commonwealth will commission the Authority at an early stage to undertake three initial National Educational Reviews, covering all providers, public and private, and all levels of higher education qualifications:

- **Teacher Education** – focusing on primary and secondary initial teacher preparation, and education for teachers of mathematics and science, and encompassing early childhood education, special education, English language teaching, and teaching of languages other than English;
- **Nurse Education** – encompassing general nursing, midwifery, community nursing, mental health nursing, health science, health services management, and paramedic practice; and
- **Business Studies** – encompassing commerce, accounting, banking, applied finance, marketing, international business, business administration, business management, hospitality management, human resource management.

These reviews will compare the learning standards of qualifications offered with the outcomes expected in respect of the Australian Qualifications Framework. The reviews will produce examples of work that would normally be assessed for awards of High Distinction, Distinction, Credit and Pass. The reviews will also identify the range of standards of performance across institutions. The reviews will point to any deficiencies among programs, and to cases of exemplary practice. The reviews will also recommend the minimum acceptable standards of student achievement for the award of different levels of higher education qualifications in each field.

The reviews will initially call for self-assessments to be prepared by each institution or provider offering the qualifications under scrutiny. The Agency will determine its guidelines for self-assessments. The Authority will arrange for external validation of the self assessments, using peer review methods, curriculum and assessment comparisons, site visits, inspections, and surveys, as required for it to make sound judgements. The relevant professional associations and employer representatives will be invited to participate in the reviews.

5.2 Student access and participation

Labor believes that higher education should be accessible and affordable for all who can benefit from the experience.

Labor recognises that different people will benefit best from policy settings that accommodate differences in backgrounds and aspirations. For some, the availability of vocational education and training in secondary school will give them a good start in the labour market, and they may not benefit immediately from further education.
They should have access to further education and training at a later stage according to their needs and circumstances.

We should frame policy on the assumption of increasing access to some form of tertiary education and training at different points in a working life.

The supply of higher education places should reflect the interplay of several factors, including the study preferences of individual students, the demands of employers for qualified workers, and the need for graduates in areas of importance to society.

However, the lock-in of historically allocated places to universities, alongside the rigid ‘funding cluster’ arrangements, constrains the responsiveness of universities to changes in student demand and labour market circumstances.

Contemporary policy thinking sees student choice as the main driver of higher education provision. This more dynamic ‘labour absorption’ approach contrasts with previous policy approaches to meet projected ‘labour requirements’. No single view is sufficient to achieve a balance of student interests, institutional capacities, contemporary labour market requirements, and longer-term community needs. The sensible course is to bring together all the views in a process of dialogue.

Hence, Labor’s approach integrates five components:

1. **generic approach to skills formation/graduate attributes**
   A balance between general and vocational elements in higher education will enable graduates to respond to immediate needs and adapt to changing circumstances.

2. **pathways, enabling people to change jobs or up-skill to meet changing circumstances**
   The development of articulated programs, enabling students to move from one qualification to another, without having to duplicate learning, will increase the opportunities for people to gain the additional skills they need in a modern economy.

3. **incentives, favouring participation in particular areas**
   Where required, government can reduce costs or provide incentives to encourage greater numbers of students and graduates into areas of critical skills shortage, or into other areas of national importance.

4. **flexibilities in the allocation of funded places by field and level of education, alongside commercial supply**
   A more flexible approach to the provision of Commonwealth-funded places will improve university responsiveness. Additionally, the universities can adopt commercial approaches to the supply of postgraduate award courses and short-cycle courses. Private providers, too, can fill niches and supplement supply in particular markets.
5. *dialogue among higher education institutions and the community*

The Compact model of funding (outlined below) will provide universities with greater flexibilities to re-assign funded places on a rolling triennial basis, without lock-ins and financial penalties. In re-basing their course offerings and student places, the universities will be expected to consult their communities, including schools, TAFE colleges, employers, other community bodies, and State and local governments. This opportunity for structured dialogue can be informed by several sources of information, as a basis for judgement:

- analyses of demographic and participation factors;
- surveys of student demand;
- labour market trend analyses and forecasts;
- employers surveys of labour requirements.

**Student financing**

Labor will maintain a dual approach to student financing. Labor will continue to allocate Commonwealth-supported student places to universities, while providing students with access to income-contingent loans to meet their share of the costs. Labor will also continue to provide income-contingent loan assistance for students enrolled with accredited private higher education providers. Labor will give particular attention to the needs of young students who are the first generation of their families to access higher education, and to ‘second chance’ adults. Equity of participation is fundamental to an inclusive society.

Labor rejects student vouchers as a way of financing higher education; student demand is an important driver of university responsiveness but it cannot be the sole driver when broader national interests also need to be taken into account.

**More affordable HECS**

HECS was introduced in 1989 as a flat rate contribution by students to the average cost of university education. A major change was made to the structure of HECS in 1996. Costs to students were increased and HECS rates were differentiated into three Bands. Further changes were introduced in 2003, when universities were allowed to raise HECS rates by up to 25 per cent. That change was justified on the grounds that students would have wider choice, including on price.

Almost all universities have now raised HECS to the limit for all their courses, and there is no competition on HECS prices. Student demand has responded adversely to the higher overall costs of participation. The effects have varied across universities and courses, including courses in scientific and technological fields of fundamental importance to national innovation. Several universities have handed back funded places for want of student demand. The system is unstable.

There is also a concern that the higher HECS costs for students, and correspondingly high graduate debt, is deterring able students from investing in higher education, with resulting opportunity costs to the economy through loss of productivity improvement. Given population ageing, Australia must rely on young people gaining the knowledge
and skills needed for a dynamic future. At the same time, we need to encourage the continuing education and training of adults.

For those preparing to enter the workforce, the prospects of graduating with a large debt can be daunting. This concern can deter young people from participating in higher education. There are also accounts of young couples being denied home mortgage finance, and deferring starting a family, because of their HECS debts. The increasing shifting of costs for higher education onto students raises fundamental questions of inter-generational equity.

We face a moral dilemma when those who are required to be self-reliant today are also pressed to contribute to those who have benefited from public subsidy in the past and expect to be publicly supported in the future.

Labor is committed to the continuation and improved functioning of the HECS system. Changes to policy settings for student financing need to be coherent with those for institutional financing. Hence, Labor will be announcing a number of measures to provide HECS relief and simplify HECS arrangements.

Options

To enable all who can benefit from higher education to have the opportunity to participate, we are giving consideration to a number of options.

1. Reducing HECS rates for all students

The rationale for an across-the board reduction in HECS is grounded in the principle of a balance of contributions between graduates who derive private benefits from higher education and general taxpayers who derive broad public benefits from a higher educated workforce and citizenry.

The student contribution has doubled from 20% to 40% of course costs on average over the last decade, yet the available evidence suggests that the social rate of return has been rising and the private rate falling over the same period. Hence, the imbalance is arguably unfair and could have inefficient effects if capable students are deterred from participating and under-invest in their human capital.


The rationale for a more targeted measure of HECS relief is based on the need to encourage a better balance in the supply of graduates for occupations that underpin Australia’s economic competitiveness, and in which there are chronic skills shortages.

3. Targeted scholarships

In 2005, there were a small number of Commonwealth Education Costs Scholarships allocated to higher education institutions. The scholarships are targeted to students on the basis of financial need, and comprise a grant of $2000 per year for up to four years.
One option (3a) is to expand the number of scholarships. A second option (3b) is to increase the value of the scholarships. A third option (3c) is to expand the number and increase the value of scholarships. A variant (3d) is to target the expansion to students undertaking courses of national importance.

4. Strategic HECS debt remissions

In view of critical skills shortages in areas of national priority and in rural and regional areas, graduates could be offered the opportunity for remission of debts due to special circumstances, by introducing a ‘job-contingent’ provision. Forgiveness of HECS could be used to attract graduates to areas of high priority skills shortages, and for retaining and upgrading the skills of graduates in high priority areas.

Areas for designation could include:

- Nursing in a rural or remote area
- Medical practice in a rural or remote area
- Specialist occupations in a regional hospital
- Veterinary practice in a rural or remote area
- Secondary teaching in mathematics, science or technology
- Primary and secondary teaching in a school classified as disadvantaged

Student income support

Financial disadvantage presents a barrier to student access to, and participation in, a university education. All members of our society should have the opportunity to access a university education if academically qualified. The financial barriers facing students who are unable to support themselves, or whose family is unable to support them, whilst engaged in higher education is something any Government concerned about equity of access needs to overcome.

Government assisted income support should be made available to students who are at a financial disadvantage to assist them to be able to study at university. Thousands of Australian families support their children while they further their education at university. Government should be there to help students whose families cannot support them, or where the costs are too great for families alone. This is especially the case for students from disadvantaged backgrounds, or students from rural and regional Australia who have to travel great distances to access university. The Isolated Children’s Parents of Australia Association regards adequate income support measures as “urgently needed” to ensure students from rural and regional backgrounds have “an equitable access to higher education.”

The income support measures offered by Government should be accessible to those in need, and once accessible, should provide a sufficient support to allow these students to continue to participate in higher education.

Paid part time or casual employment to supplement Government provided income support is no longer an added extra for students. Today’s students expect to undertake

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paid work, and for many it has become a necessity. Given income support payment rates, students require additional income from paid employment to make ends meet.

Government should provide an income support system sufficient so that part time work does not adversely affect a student’s learning. Reflecting the reality that students do work, the income support system administered by Government should be structured so that students are not disadvantaged and penalised when they do work.

The current student income support system is suffering from years of policy neglect. Addressing income support is a critical part of addressing equitable access and participation in higher education. Ensuring the student income support system is adequate to meet the needs of eligible students will be a priority of a Federal Labor Government.

The AVCC’s survey of student finances is being updated this year. No doubt the outcomes of the new survey will reflect that for the vast majority of students paid employment is a necessity. Sufficient support must be provided to ensure that students can balance work and study, and the structure of the student income support system, particularly the personal income tests, need to be flexible and adaptable so that they do not act as a disincentive to work, or worse, make unregulated ‘cash’ work the preferred option for students.

**Options**

1. **Extending the income bank**

As many students use non-teaching periods in the summer or winter breaks to maximise their employment opportunities, the income bank system could be expanded to provide greater reward for students who do earn more in intensive bursts, rather than have their payments reduce so quickly. Increasing the $6000 bank, or at the very least indexing that amount to cost of living adjustments could assist many students.

2. **Adjustments to the taper rates could also remove the disincentives built into the current system.**

For students earning fortnightly income between $236 and $316 their payment reduces by 50 cents in the dollar. Income above $316 reduces payment by 60 cents in the dollar. These taper rates could be changed to allow more earned income to be retained before payments are reduced.

3a. **Increasing the threshold for the parental income test**

The parental means test still remains one of the most significant barriers to students being able to access Youth Allowance. The parental income test could be increased to allow greater access to the payments system for those assessed as family dependent.

3b. **Student independence from the parental income test**

Student eligibility for income support is assessed against parental income and assets while that student is deemed to be dependent on their family. Independence from parental means testing is achieved once a student turns 25, or by meeting other work
and activity tests. Current work and activity tests to establish independence from parental income testing assists some students attain the independent rate before the age threshold, however this is either done through intensive work, which can impact on study, or through other means capable of generating apparent income generally available only to a limited number of families.

The current age of independence is 25 years. This age could be reduced to provide relief to families and to enable adult students to live independently of their parents.

4. Rent assistance for Austudy recipients

Consideration also needs to be given as to how best to remove inequities in the system between students on different payments. For example, students on Youth Allowance are eligible to receive rent assistance, but students over the age of 25 on Austudy cannot. Rent assistance could be extended to students on Austudy.

5. Income support for Masters students undertaking professional qualifications

Some professions require a Masters level qualification for professional registration. Consideration could be given to extending payment eligibility to those postgraduate or Masters level qualifications which are necessary for professional registration in a student’s chosen discipline, such as Psychology. This type of adjustment could also allow students undertaking a degree structure such as that proposed by the University of Melbourne to be eligible for income support until they have finished their professional qualification.

Ending full-fee undergraduate places for Australian students at public universities

Full-fee places for domestic undergraduates were initiated in 1996, in the context of $1.8 billion cuts to higher education budget outlays. Full-fee places were a means of expanding the system through private rather than public expenditure. Initially, the take-up of full-fee places was slow. In 2004, the Government introduced FEE-HELP loans up to $50,000 for full fee payers. In the 2006-07 Budget, the FEE-HELP loan limit was raised to $80,000, except for medicine, dentistry and veterinary science where the loan limit is now $100,000.

The argument that students should have the option to pay full fees, if they do not require a public subsidy to do so, reflects a view of higher education as entirely a private investment. The difference in the take-up of full-fee places for the period 1996– 2003 compared with 2004-2006, shows that most students need FEE-HELP loan support to access full-fee places. Additionally, many full-fee payers transfer to a HECS place after their initial year(s) of study. For it to work, the full-fee policy requires public subsidy. There is, therefore, a legitimate public interest in the policy consequences.

The full-fee policy, complemented by FEE-HELP, has given several of the more prestigious universities, in particular, the opportunity to ‘rent seek’ in fields of high student demand, by offering places to students with lower entry scores than those required for a HECS place. Such an approach is understandably supported by universities in the best positions to benefit. It does not follow necessarily that it is
good policy for the Australian higher education system overall, nor for Australia. It is not even necessarily a sustainable policy for the prestigious universities themselves, whose interests can normally be expected to remain elite and not to grow too large, especially in undergraduate education.

Contrary to their expectations, universities have not experienced a reduction in government regulation as a result of the introduction of ‘pricing flexibilities’. To the contrary, there is greater Government intrusion into the micro affairs of universities than ever before. Full-fee places operate within a system of volume controls over the number and mix of students studying different subjects in their degree course.

There is also a lack of transparency about the range that universities allow when admitting students with scores lower than those they require for HECS-based access. The frequently cited maximum range is 5 tertiary entrance rank (or equivalent) points, but in practice the range extends frequently beyond 10 points and, in some instances, over 15 points. That is, a student who can afford to pay full fees can buy their way into a degree program with a score of 80, while a HECS student needs 95 to enter the same course.95 It is misleading to suggest that the policy is aimed at students who “just miss out”.

The merit-equity nexus is broken when better-off students gain access to a place denied to others who have better marks, and who may have worked harder. 96

A system that leaves easy ways out of academic merit competition for the relatively well off is fundamentally unfair. It has the potential for higher education to become a mechanism for reproducing social stratification, in contrast to its longstanding role in Australia as a means of upward social mobility, and its important contribution through human capital formation, to productivity growth.

Full-fee access also significantly raises the costs for the preparation of professionals, with the attendant risk that after graduation they will seek to recover those costs by passing them on to their clients, patients or customers. This is a particular problem in medicine, where patients are captive to doctor-determined prices. With doctors now graduating with education debts well in excess of $100,000, there is serious cause for concern.

Full-fee access can also exacerbate the loss of talent from economically important occupations, such as in science, engineering and technology, as fee-paying students are drawn to more lucrative jobs, such as in Law. Australia will not necessarily be better off with more lawyers and fewer scientists and engineers.

An overarching concern with the full-fee policy is that it undermines the rationale for public subsidy of the costs of Australian students obtaining their first tertiary qualification. It makes it possible eventually to argue that the public tuition subsidy built into HECS should be removed and all students should be funded only through loan support via FEE-HELP. In that scenario there would be full price and volume deregulation, and buying a higher education place would be like buying a car or a

carpet. That is a logical consequence of a policy based on a view of higher education simply as private investment.

Labor will put an end to full-fee places for domestic undergraduate students in our public universities. There are a few universities that have substantial revenue from providing full-fee places to Australian undergraduate students. The largest of them obtains around $20 million annually from that source. They should not suffer a loss in their overall Government funding because of policy change. Arrangements can and will be put in place to accommodate their circumstances.

Labor will increase public funding for universities, vary funding rates for student places according to the different circumstances of universities, and increase their ability to shift funded places to meet student demand. These changes to public funding arrangements will remove much of the pressure that has caused resort to price increases to students.

**Expansion of Associate Degree programs**

The Associate Degree was entered as a higher education qualification in the Australian Qualifications Framework in 2002. The Associate Degree can be offered by universities, and by TAFE colleges and institutes, and private education and training providers, accredited by a higher education accrediting authority. The Associate Degree can be a qualification for which students can enrol directly, and it can build on Certificate and Diploma level studies in vocational education and training. The Associate Degree can be an exit qualification for employment, and it can articulate to a Bachelor Degree. Thus the Associate Degree uniquely bridges Vocational Education and Training and Higher Education.

Shortfalls in the preparation of high-level technicians and associate professionals constitute a major, long-term skills deficit for Australia. Particular gaps in the associate professional workforce include:

- business, finance, computing support and administration;
- health, welfare and community services, including child care and pre-school;
- hospitality managers, sales and marketing; and
- specific associate professionals, such as library technicians and sports associate professionals.

On the one hand, preparation for these occupations has been regarded, conventionally, to be beyond the main function of vocational education and training providers. On the other hand, the Bachelor Degree is typically too long and its orientation too broad for preparation for associate professional roles. Labor proposes to expand opportunities for students at the Associate Degree level.

Currently, students undertaking studies for an Associate Degree with a university are eligible for HECS tuition support and a HECS loan. Labor intends extending HECS places for Associate Degree students enrolled with a TAFE college or institute. Additionally, students enrolled in Associate Degree programs with accredited private providers will have access to FEE-HELP loans.
It is intended that by expanding the availability of Associate Degree programs through universities, TAFE colleges and private providers, higher education will become available to a broader range of students. It will also facilitate qualifications upgrading for people in the workforce with Certificate and Diploma qualifications. Individuals who wish to re-enter the workforce will also have greater opportunities to upgrade their qualifications so that they can return to their previous occupation or change occupation. Additionally, this initiative will expand access to higher education for many more communities in rural, isolated and outer metropolitan areas where there are no university campuses.

A further benefit of this initiative is that will widen choices for school leavers, and reduce the pressure on a number of them to prepare at high school for direct admission to a Bachelor Degree program. Many students want shorter and more focussed ways of getting the initial qualification they need to gain employment with career prospects.

The initiative will promote greater diversity in Australian tertiary education, and address a gap in the provision of short-cycle programs that other countries have managed to bridge. It will also open up a source of entry to higher education for students who are less likely to succeed through direct entry to Bachelor degree studies, while safeguarding the quality of higher education.

5.3 Institutional financing

Mission-based compacts with public universities

In recognition of the special place that public universities have within Australian society, Labor will renew the ‘compact’ with public universities to reflect the contemporary needs of the nation, and the dynamic environment in which the universities now operate.

Labor’s proposed approach will give Australia’s universities the freedom necessary to form and implement strategies for their future role in competitive markets, while safeguarding public good benefits for the Australian community. It will also help in the necessary rebuilding of trust and partnership between universities and the wider community, while promoting diversity and assuring quality. Underlying this new approach are the following policy principles:

- Universities need greater operating autonomy in order to function effectively and competitively in local and international markets;
- Public funding should assist each university to pursue its distinctive mission and to excel in what it does best; and
- Universities have a reciprocal responsibility to explain their purposes, and to report publicly on how well they have performed against their own goals and the performance standards expected of them.

It is intended that mission-based compacts will be negotiated between the Commonwealth and individual public universities. The compacts will comprise four Commonwealth-funded components:
I. *Education* – undergraduate and/or postgraduate programs leading to an Australian higher education qualification (other than a research degree);

II. *Research and research education* – high quality creative work undertaken on a systematic basis to increase the stock of knowledge, and regarded by experts as significant internationally or of national importance; and research education leading to a higher degree by research;

III. *Community outreach* – the provision of services to meet the needs of communities associated with and/or proximate to the university, and access to university facilities by community organisations; and

IV. *Innovative activities* – structured activities additional to normal operations, involving knowledge transfer services to enterprises and other groups, collaboration with other universities and institutions, accelerated programs, education and/or research aligned with the northern hemisphere academic year.

Every university, because it enrols students, will have a compact covering its publicly-funded educational activities. It is expected that most universities will be involved, to varying degrees, in all four of the compact components. However, it is not proposed to require any university to participate in all four or to restrict any university to only, say, three or two of the components, although any university will have that option. The excluded option is that of the ‘teaching-only’ university.

All academics will have opportunities to research.

This will occur via components II or IV, if not at their own institution, then via collaboration with other universities or publicly-funded research agencies, and will be consistent with the National Protocol criteria and processes for recognition of universities.

For example, an academic member of the University of Sydney may work on tropical marine research at James Cook University, another may work on Antarctic research at the University of Tasmania, while one from Tasmania works on cancer research at the University of Melbourne and another on advanced materials at the University of South Australia, and a small team from that university works on brain research at Swinburne. The research output of the individuals and teams would belong to the visiting members and be attributed to their home universities.

It is already the case that some universities are more comprehensive in research than others, and some perform at higher standards in different areas than others. Most have areas of research, sometimes niche in their field, where individuals and/or teams are performing at high standards. Policy settings should let them do what they do best, and allow them to link with others as they need.

It is intended that the proportions of funding among the components will vary significantly between universities, reflecting differences in their missions, circumstances and capabilities.

Compact funding will be provided on a rolling triennial basis, in order to give universities predictability for their planning. Workplace relations and governance conditions attaching to funding will be removed.
An overarching compact framework for each university would set an agreed distribution of funds across the four components, and the performance expectations and reporting requirements for each component. Labor will consult institutions on the reporting framework.

I. Education

Establishing the base amount for education

The education funding envelope for a university will be based initially on the amount of funding it receives currently through the Commonwealth Grants Scheme.

Within that budget, each university will propose the number of student places, and the mix of enrolments by broad fields of education, that it considers to be the most cost-effective and appropriate response it can make to meeting student demand and labour market needs.

A university will not be bound by its historical structure of provision. It may shift places from low to high cost fields, or vice versa, with consequential adjustments up or down to its number of places within its budget. It may also propose shifts from undergraduate to postgraduate level for courses requiring a postgraduate qualification for labour market entry.

For illustrative purposes, say a university has a funding envelope of $100M. Assume the average funding rate per place is $10,000, and there are three broad funding rates (excluding clinical components because of special issues of access and cost) of $7,500, $9,750 and $12,750. That university would normally supply 10,000 student places in a year. Under the proposed new flexibilities, the university could, at the extremes, supply between 7,840 and 13,330 places.

This opportunity to restructure educational offerings will give universities greater scope to respond to labour market changes, and to develop new areas and ways of learning.

Therefore, each university will be expected to consult with State/Territory and regional authorities, employers, schools and other community organisations in its planning.

These consultative processes, together with new funding for additional places, will not only help to balance supply and demand for higher education in aggregate, but also to improve the fit between graduate supply by field of study and labour demand by occupation.

The Commonwealth will monitor the overall trend of universities’ proposals on a national and regional basis. The Commonwealth will ensure that sufficient capacity is maintained to supply graduates for areas of critical skills shortages, and to sustain scholarship in fields of national importance, but for which student demand may be low.
The Commonwealth will also play a ‘broker’ role, as necessary, to obtain a collaborative outcome between universities that preserves within the system, for instance, the teaching of physics, foreign languages, and classics. Where necessary, a premium payment will be made to a designated provider to maintain programs in such areas.

**Meeting regional and special needs**

Each university will have the opportunity to identify particular factors impacting on its operating cost structure, such as those deriving from location, special costs associated with the composition of the student body, and particular costs related to course specialisations and modes of provision. It is intended to develop loadings that will add to the core grant for education. There will be three sets of loadings:

a. fixed cost loadings, reflecting the additional base cost of operating in a location;
b. variable cost loadings, reflecting the number of students by cost category of special need;
c. an Indigenous student progression loading.

A ‘regional loading’ scheme was introduced in 2004, totalling $146 million over five years. It was allocated to selected institutions having campuses in designated areas. Allocations reflect a mix of size of institution and distance from a capital city (except Darwin).

Labor will retain and enhance regional loadings. Variable cost loadings can be calculated from experience with targeted programs for equity and participation over the years, such as the broad amounts of additional assistance required to promote successful participation of students from disadvantaged backgrounds, students with varying disabilities, and Indigenous students.

The funding amount for loadings will vary year on year according to changes in the ‘caseload mix’ of a university. All of the indicators available for inclusion in cost loadings will be transparent and verifiable. Additional dimensions affecting funding outcomes for universities would be based on the performance improvement objectives for education that each university sets itself.

To improve the graduation rates of Indigenous students, Labor will provide incentive payments to higher education institutions, through weightings for Indigenous student enrolments in the second, third and fourth years of an Associate Degree and a Bachelor Degree course.

**Enriching educational offerings**

In addition to the new flexibilities in funded places, and margins for special cost factors, a university may also propose:

i. additional educational programs and/or expansion of programs to meet additional demand, and
ii. innovations to intensify the learning experiences of students, raise teaching quality, and/or modify course delivery technology.

The aggregate funding for the current ‘Learning and Teaching Performance Fund’ will be redirected, and redistributed among universities, for these purposes.

**The range of student enrolments**

The Commonwealth will agree with each university the minimum and maximum number of total Commonwealth-supported student places expected to be offered in each of the three years ahead.

The interest of the Commonwealth, thereafter, will be to monitor the delivery of a university against its undertakings in terms of the total number of places provided. Within its education funding envelope, a university will decide the distribution of funded places by field of education, the content and structure of learning experiences, and the delivery methods.

In exceptional cases, the Commonwealth may require a university to maintain or expand its course offerings in areas of particular community need. In some circumstances, additional funds may be provided to a university for this purpose. Alternatively, a university may need to reallocate places within its funding envelope.

Over time, within this more flexible framework a number of universities may expand their total enrolment numbers, for example, to meet growth in demand in regions of population growth, or from particular industries and occupations. Others may reduce their total undergraduate enrolments, for example, to increase the funding level per student, to increase the proportion of students undertaking high cost programs, and/or to increase postgraduate coursework opportunities.

It is intended to undertake a contemporary Australian study of teaching cost relativities along the lines of the English model of three broad cost bands reflecting clinical, laboratory/field, and classroom settings for learning. The revised relativities will contribute to greater flexibility in the allocation of student places.

**Student services and representation**

Universities must be able to provide the non-academic student support, activities, amenities and programs free from Government dictates and interference. Labor is committed to ensuring that student services like childcare, health services, counselling, advocacy, and sporting facilities are maintained at our universities.

Labor believes that independent student representation and advocacy services are essential in our universities. Student organisations are often the only places students can turn to for independent advice and support when they have problems with their university administration. Student organisations are uniquely placed to provide representation and advocacy on behalf of students and they should be supported in this task.
1. Student services and amenities

As part of the compact negotiations between the university and Government, financial support would be provided to ensure universities have the capacity to provide student services, amenities, activities and facilities. The financial imposition on students will not increase.

2. Student representation and advocacy

As part of the compact negotiations universities would need to demonstrate that an independent, democratic and securely funded student representative body exists. This body would need to be sufficiently resourced to provide advocacy and representation services to students, and to present student opinion and concerns to the university, Government and the community.

II. Research and research education

The research and research education component of the compact will include the funds currently allocated by formula through the Institutional Grants Scheme, the Research Training Scheme, and postgraduate scholarships, and other support for research students.

Access to ARC and NHMRC funding will not be affected by these new arrangements. The Research Infrastructure Block Grants scheme will continue to be allocated to universities and other eligible institutions, based on their share of peer-reviewed competitive grant income each year.

Establishing the base amount

The funding allocations from the Research Training Scheme, the Institutional Grants Scheme, Australian Postgraduate Awards, and International Postgraduate Awards, will be taken as the reference point for the research and research education component of compact funding for a university.

Universities will have the opportunity to re-configure those funds in aggregate, and to propose an internal re-allocation of all the available resources that makes best use of their research capabilities. Subject to one condition, the re-basing of funds will permit any combination of shifts between funding of researcher appointments, funding of research infrastructure, funding of research students, and funding of scholarships.

The one condition is that funding of places for research students, and associated scholarships, will be permissible only in disciplinary (and multi-disciplinary) fields where the quality of research performed within the university meets verifiably high international standards, or addresses matters of national importance at the verifiably, highest standards of Australian research performance.

The quality of research graduates is fundamental to the development and renewal of Australia’s knowledge base. If we let standards fall in research education we will not be able to secure our future.
Quality research education cannot occur outside a quality research environment.

In developing their strategies for research and research education, it is expected that some universities, which are comprehensive in quality research, may identify a wide range of research education capacities. For some institutions, these areas for research education may correspond to their comprehensiveness in undergraduate and postgraduate education.

Some universities may identify the potential to expand research education into fields where they do research but do not yet have students. Others may be more selective, confining their research education to a limited range of fields of research. Others again may be niche, offering highly selective entry to a limited number of highly focused areas of research. A few may consider that their best service to their research-capable students in a particular field is to help them articulate to quality research education programs elsewhere.

These decisions are best made by the universities themselves.

Each university should identify and develop its strengths, engage with its communities, deliver services of value and, thereby, fulfil its mission. When the relative strengths are known, public resources can be invested in building up those areas where Australia can perform at the cutting-edge of world research, and in areas that address national priorities and help meet community needs. The sum of these diverse contributions is what counts for Australia.

**Verification of research education quality**

Labor’s approach to the verification of the quality of research performance is outlined below at Section 6.2.

It is intended that each university will be held responsible for identifying its research strengths, and testifying to its performance standards in those declared areas. The declarations of a university regarding the quality of its research will be subject to independent, external validation.

A university’s declaration will encompass: (a) the quality and impact of the volume of its research output produced over the previous five years by researchers of the university; and (b) the quality of the research education environment of the university culture in general, and in the specific areas where research degree students are supervised.

With regard to research education, each university will identify to the Australian Higher Education Quality Agency those fields of research in which it offers, or plans to offer within the next three years, higher degree by research programs (Masters by Research, PhD and other research-based Doctorates), for Australian and international students. The university will also identify each of its academic staff who are authorised by the university to supervise a PhD student in a field of research.

The university will advise the Australian Higher Education Quality Agency of the current and recent (last five years) research activity of its academic staff authorised to
supervise a PhD candidate, including research grants, research outputs, and indicators of esteem (such as membership of academies, invitations to give keynote addresses or distinguished performances).

The Australian Higher Education Quality Agency will assess the information provided by each university and, where appropriate, will compare that information with the results of its broader evaluations of the research quality and impact of the university in the field (as outlined at 6.2).

Where it deems necessary, the Australian Higher Education Quality Agency may call for additional information about the research capacity of the university and the supervisors in a particular field of research education.

The Australian Higher Education Quality Agency will report its assessments of the research education capacity to the relevant university and the Commonwealth.

The range of research education enrolments

In the light of these findings, universities will have the opportunity to redistribute the funds for the research and research education component of the compact.

A university will be expected to cease admitting research degree candidates to areas where the research of the university in that area has not been rated satisfactorily for the quality of its performance.

The university will then have a range of options. It may shift funds for research education within the component to areas of research rated satisfactorily; this may involve either increasing the concentration of places for research education in particular areas, or opening up new opportunities for research education in areas rated well for research. Another option will be for the university to direct the funds to other research-related purposes, e.g. to strengthen its research infrastructure, or otherwise build its capability in those fields of research where it has rated well.

Alternatively, the university may propose a modification of the distribution of funding among the components of its compact. Consideration would then be given to transferring the funds to undergraduate education or postgraduate coursework places, or to community outreach or innovative activities.

Where a university is rated well for all its current areas of research education, and also for areas of research where it has no students, the university will have the choice of spreading the funds for research education across more fields, or, depending on its strategic priorities, of winding down in one or more areas to build up new strengths.

Alternatively, such a university may propose a modification of the distribution of funds among the components of the compact. It may seek to expand funding for research education, either by concentrating its undergraduate or postgraduate coursework offerings, or by seeking additional funds in total for its compact.
III. Community outreach

As an extension of their education and research functions, universities variously provide services for their regional communities and others. The expansion and enhancement of the services of universities could benefit many communities. Many universities, too, could benefit from increased opportunities for them to develop their service capacity, to strengthen and diversify the contributions they make to their communities.

It is intended that the community outreach component of the compact will take the form of a block grant to underpin universities’ engagement with their communities. There is currently no explicit funding for this purpose. Labor recognises the importance of community outreach in the role of contemporary universities.

Community outreach funding

It is proposed that each university will (a) identify the areas of its community outreach that it considers important to its mission, and (b) estimate the cost to the university of its current activities in those areas. It is also expected that universities will (c) evaluate their current activities in the light of community views about effectiveness and priorities. On the basis of these appraisals, each university will commit to a program of community outreach activities for the three years ahead.

The Commonwealth will offer to match a proportion of the forward commitment of effort, with an injection of funds to increase the capacity of a university to provide additional or improved services.

The Commonwealth will offer funds for new services, greater usage of current services, and quality improvement in current services. The Commonwealth will not require additional cash contributions by a university. However, to indicate community commitment, it will expect the university to obtain financial and in-kind contributions from other community organisations, government bodies, businesses and benefactors. The total additional funding will be sufficient to support the continuation of the new or augmented services for at least three years.

The additional Commonwealth grant amount will reflect the range and type of activities proposed for the community outreach component. These activities could include:

- concerted programs to deal with complex economic, social, health, or environmental issues;
- programs supporting educational performance in schools;
- internships and service-learning placements in community institutions, such as aged care facilities, child care, and support services for people with special needs;
- collaboration with TAFE institutions and schools to meet changing labour market requirements;
- access to equipment and specialist training for small and medium enterprises (where the service is not available commercially)
contributions to public policy formulation, analysis and evaluation; and
social infrastructure for community use (e.g. cultural and sporting facilities &
events).

Funding for the community service component will be reviewed at the end of the first
three year period. Evaluations will include community usage rates of services
provided, community satisfaction and outcomes.

In the light of evaluations of effectiveness, a university may decide to shift resources
from one activity to another within the component, and increase or reduce its
expenditure on the component in aggregate by transferring funds among the
components. The Commonwealth may determine to maintain or increase or reduce its
additional expenditure for the component.

The Commonwealth will not continue to fund services that have low levels of
community impact and support. The Commonwealth will not expect a university to
absorb the costs of all or any of the expanded or enhanced services beyond the three
year forward commitment.

Funding of a university’s community outreach activities may be sourced fully from the
university’s own resources, or from external income for specific services, or through a
mix of both. Where a university provides services on a fee-for-service basis, the prices
it charges may fully recover its costs or involve a partial subsidy. Where there is
competition for services, in accordance with competition policy principles, a university
is required to price its services at least at a sufficient level to recover the full costs of
providing the service. A university cannot use government funding to lower its prices
to undercut competitors. Hence, it is not intended generally that the community
outreach component of the compact will include the supply of commercial services.

This component of the compact will not be activated in markets where there are
competitors to a university in supplying those services. However, where there no
other providers or potential providers of a service needed by a community, and the
community is willing to pay a price for that service, but cannot afford the full costs of
provision, the community outreach component may be activated; that is, where the
university is the only viable provider.

Services purchased from a university by enterprises (e.g. testing), agencies (e.g.
consulting) and individuals (e.g. continuing education) will normally fall outside the
scope of the compact. Services contracted by governments and not-for-profit
community organisations will normally be excluded from the compact, except where a
demonstrably greater public benefit can be obtained by adding resources to expand
and/or enhance the contracted service.
IV. Innovative activities

Labor will provide new, recurrent funding for the innovative activities component of the compact.

In establishing this new funding program it will be necessary to call for and assess submissions from universities. For the first three years, the available funds will be divided among five pools:

i. National ‘Hub & Spokes’ arrangements: establishing national ‘hubs’ of research capability in universities with strong research infrastructure and critical mass of expertise, with ‘spokes’ out to academic staff in other universities to enable their access to the capability;

ii. Knowledge transfer: new or expanded contributions to the national innovation system, through access to university-based knowledge, scientific instrumentation and know-how, for enterprises, government agencies and community organisations, including arrangements for university staff to undertake industry-related work;

iii. Accelerated degree options for students: new or expanded arrangements enabling students to complete a degree program, or undertake enrichment units, including the option of completing a standard four-year degree in three years;

iv. International collaboration: new or expanded educational interactions with international universities, including alignment of academic calendars with international universities, for the promotion of international student and staff exchanges, and the development of joint educational and/or research programs; and

v. University-TAFE & university-school arrangements: new educational linkages that expand educational pathways, including programs for gifted and talented students, enabling and bridging courses, and mixed programs involving academic study and practical learning.

Funding innovative activities

Funding for national ‘hub & spokes’ arrangements will enable academic staff in one university, with limited research facilities in a field, to have access to the research facilities of another university. Similarly, an academic staff member from a university would have the opportunity to work in research teams in a university with greater capacity in a field. The employing university will be funded on a block basis for collaborative research placements, and will negotiate with host institutions of their choice (depending on field) a fee for service. The amount of funding will reflect the number of staff put forward by a university seeking to access the services of another university.

Funding for knowledge transfer activities will enable universities to make an added value impact to the productivity of enterprises and to community problem solving.
Commonwealth funds will contribute to the costs of activities, on the assumption that those making use of the university’s facilities and services will make a contribution. The level of Commonwealth funding will reflect the scale of the activities and the significance of the potential impact.

Funding for accelerated degree options will be paid to a university at one quarter of the average cost of a compact subsidised full-time place, for the study load of students participating in the accelerated programs.

Funding for international collaboration will enable Australian students to take a course of studies with an overseas university, without disruption to their studies, or enable staff of an overseas university to participate in the delivery of programs and services to students in Australia. Funds will be payable to the initiating Australian university on the basis of the number of participating students, and/or the average costs of participating staff appointments.

Funding for university-school and/or university-TAFE collaborations will payable to a university on the basis of a signed agreement between the parties, indicating the resource commitments of each of the participants, and the expected performance outcomes.

**Compact sign-off**

The Commonwealth will consult each State and Territory over the content and directions of the draft compact for each of the universities in its jurisdiction.

The consultations will aim to ensure the funded initiatives complement the objectives and programs of those governments, and to identify synergies and opportunities to access other funding sources.

Inter-governmental cooperation will be important to the successful diversification of universities, their participation with schools and TAFE institutions, and their involvement with the social, environmental regional development programs of governments.

Normally, compacts will be signed-off by a university and the Commonwealth. State/Territory governments also may be a party to particular components of a compact, where they contribute additional resources. State/Territory governments will also be invited to participate in the evaluation of a compact.

Compact funding will be acquitted at the aggregate level and for each of the (up to four) components for which the university is specifically funded.

Reports will be based on the administrative data that a university uses for its own administration, rather than through a separate set of statistical collections.

For most universities for most of the time, annual reporting will be on exception basis, where performance has deviated from plan, rather than for every activity. More detailed and comprehensive reporting will only be required when the Commonwealth has reason to be concerned about the overall performance of a university.
Funds currently allocated to most specific-purpose programs will be rolled-up into the mission-based compacts. Hence there will be a much reduced compliance, bidding and reporting burden placed on universities, so that they can better attend to their main business.

Whereas current controls on inputs and processes will be loosened, it is intended to adopt a more rigorous approach to the assessment and validation of quality in education and research. Payments will be made to universities for student places only in degree programs that meet threshold educational standards.

For universities, the main benefits will be less detailed government control over their operations, and enhanced capacity to fulfil their missions, through:

- increased flexibility in the use of Commonwealth funds to achieve mission-driven goals, with no loss of total funding for any individual institution;
- forward funding allocations on a rolling triennial basis, providing predictability for planning;
- greater recognition within compact funding of specific cost factors affecting performance;
- simplification of accountability reporting (exception-based), relying on institutions’ own governance & management processes and outputs; and
- removal of constraints and conditions currently imposed through Commonwealth funding of student places, affecting the internal governance, workplace arrangements, and student services of universities, and thereby limiting the flexibility that universities need for competitive operation.

Labor proposes to repeal the *Higher Education Support Act 2003* and replace it with two new Acts: a *Public Universities Funding Act*; and a *Higher Education Provider Assistance Act*.

**Private providers**

Labor recognises the role that private providers play in extending choices for individual learners and meeting particular needs for higher education qualifications. Private providers are an important complement to public universities, and can be a source of innovation for the system generally.

Labor will continue the access of students enrolled with accredited private higher education providers to income-contingent FEE-HELP loans. Private institutions which have Commonwealth supported places will retain those places.

All providers of higher education qualifications will be required to offer their students the learning experiences and learning resources necessary for them to acquire the knowledge, skills and understandings that their qualifications vouch for. These requirements will include access to library services, and, as appropriate, access to laboratories.

Private providers are expected to offer Australian qualifications at least at the minimum acceptable standard for each level of award. They will be subject to the same processes of regular evaluation of quality standards that apply to universities.
Public institutions of higher education other than universities

Special arrangements will be made for non-university public providers currently eligible for Commonwealth support, on the premise that none of them will suffer a loss to their current level of grants. A number of these institutions will be offered a customised arrangement for the continuation of their teaching services, together with specific community services. Those that currently receive funding for teaching purposes only will continue to be funded on that basis.
6. Research

A Labor Government will maintain and enhance the dual system of funding for research, via (a) block funding for competitive research grants allocated through independent research funding councils (ARC and NHMRC) on the basis of academic peer review, and (b) block funding for research infrastructure, allocated on the basis of research performance quality.

Labor will continue the forward funding commitments for research outlined in *Backing Australia’s Ability*. The measures outlined below are additional to those commitments.

Labor will maintain separate lines of funding support for publicly-funded research agencies including AIMS, ANSTO and CSIRO.

The independence of the Australian Research Council will be restored.

The Cooperative Research Centres program will be reinvigorated.

Labor will conduct separate consultations and announcements in respect of non-university centres of research.

6.1 Labor’s research policy objectives

Given Australia’s economic structure, a key question is what kind of research capabilities should we build to promote sustainable economic development?

First, we must ensure we have very smart people researching in areas of evident national need. If we do not provide them with the facilities, equipment, personnel and services they need to perform at their best, they are likely to go elsewhere and be lost to Australia. We face that risk now in areas such as plant and animal research, marine research and geosciences.

Second, we must build research capacities and mechanisms that support and advance the Australian national innovation system. We have failed to do so, and we can see the consequence in declining productivity, the low proportion of firms that are innovating, and weak export performance in knowledge-based industries.

Australia’s research also needs to contribute to solving Australia’s social and environmental problems, expanding our cultural understandings and creative possibilities, and generally advancing knowledge. It is imperative that we build capacity for problem-based, multi-disciplinary research that contributes to national innovation and improved community wellbeing. All research needs to be conducted at standards of excellence in the relevant disciplines and multi-disciplinary areas.

Given the scale and pace of investment in leading universities and technical institutes in the northern hemisphere – especially in China, India, Europe and North America – and the intensifying international competition for intellectual talent, Australia is at serious risk of becoming a backwater. We have to have the capability within the nation
to play at the international cutting edge in important fields of knowledge advancement. As a relatively small country we simply cannot afford to spread the available resources too thinly. Yet that has been the main approach of past and current policy, rather than to invest on a bigger scale in a more limited range of areas where we play on the world stage.

Australia’s ability to perform among the world’s best is not confined, and should not be confined, to scientific research alone. The big challenges require advances in the Humanities and Social Sciences, to bring about the changes in human behaviour that are necessary to reduce sickness, poverty, violence, and discrimination, to make the adjustments to the use of resources we have to make to safeguard the environment, and to improve organisational effectiveness. The Arts and Humanities are also generators of ideas that can create new products and services, as well as being sources of critique that can help break us out of complacency.

Merely to sustain a quality national higher education system in a globalising world, we must have some pinnacles of performance that demonstrate what we can achieve. In research, we must be prepared to think big and invest in what we are capable of achieving. This does not mean that all fields of research require large-scale facilities or critical mass of expertise. In a networked world, an individual and a small team can make outstanding contributions to knowledge, whether in the physical sciences or the humanities. Greater concentration of research capability in Australia, both in metropolitan and regional institutions, can complement the work of such individuals and teams, through their access to facilities and services.

Labor’s aims for research and research education are to strengthen Australia’s knowledge base, and enhance the contribution of Australia’s research capabilities to national economic development, international competitiveness and the attainment of social goals.

In Labor’s view, it is imperative that:

- Australia must sustain quality research capability in fields of economic, social, cultural, environmental, and strategic importance, nationally and regionally;
- Australia must have, within its overall research capability, a spectrum of research strengths and approaches – ranging from pure basic, long-term research to applied, short-term research;
- Australia’s research must include problem-based and multi-disciplinary activities that make a demonstrable contribution to innovation and community wellbeing;
- Australian research must perform at the highest international standards and, through scholarly exchange, enable the nation to access the world’s science and technology advancements;
- Australia’s research education must occur only in areas where research is being performed at the highest levels of quality;
- Australia must be able to attract and retain highly talented researchers;
- Australia’s research infrastructure must be at a competitive world scale.
6.2 Verifying the quality of research

It is imperative for Australia’s international position that the research undertaken in our universities and research organisations achieves excellence. It is important to the preparedness of the Australian community to support the efforts of our researchers that the quality of performance can be demonstrated. It is important also to be able to identify where Australia’s current and emerging research strengths lie, so that future investment can be directed to sustaining them.

It is intended that each university will be held responsible for identifying its research strengths, and testifying to its performance standards in those declared areas. The declarations of a university regarding the quality of its research will be subject to independent, external validation.

The Australian Higher Education Quality Agency will establish a Research Evaluation Unit with expertise for coordinating the processes of research quality performance assessments.

A university’s declaration will encompass: (a) the quality and impact of the volume of its research output produced over the previous five years by researchers of the university; and (b) the research directions and priorities of the university for the years ahead; and (c) the quality of the research education environment of the university culture in general, and in the specific areas where research degree students are supervised or proposed to be supervised.

Institutional self-assessment of research quality

A university will gather evidence in support of its declaration of research strengths at the six digit level of the Research Fields, Courses and Disciplines classification. For this purpose, institutional reports of research quality and impact assessments will include:

- reference to the available, reputable research quality metrics;
- tailored processes of peer review, involving international as well as national assessors;
- indicators of research application and impact;
- indicators of academic esteem; and
- statements of usefulness of research by end-users of the research.

For over a decade, universities have been reporting to the Commonwealth the number of research publications produced each year by category of publication. The bulk of the assessable material proposed to be evaluated for university self-assessments is available, and universities have established information systems for coding it and collecting new data. Hence, it is not envisaged that the proposed process will require the development of completely new data sets and information systems. However, for some fields of research, especially in the arts and humanities, design and construction, the current publications collections are deficient and will need to be augmented, for instance, by exhibits and performances.
Available metrics that can be scaled for quality in many fields of scientific research include the volume of publications in quality journals, the citation rates of articles, and the relative impact of citations. Some indicators do not suit all scientific fields commensurately (e.g. citations for mathematics). In the arts, for instance, it may be necessary to develop a special bank of indicators for particular fields, such as the international and national status of venues for exhibits or performances, or the impact of a design, technique or method on the practice of leading performers or directors.

Research income data (also reported annually to the Commonwealth) is another source of research quality and impact indicators. The share of research income from competitive grants by field reflects success in the peer-reviewed national contest for research funding.

It is intended that a university’s self assessment of its research quality will include external peer and end-user assessments.

**External validation of institutional assessments**

As the purpose of the self-assessments is to inform the best internal distribution of funds allocated to a university for research and research education, it is not necessary for all universities to undertake concurrently all their processes of assessment. There are also logistical factors that would constrain a once-off, comprehensive approach. In some fields of research there is a limited group of potential assessors and in most fields a limited group of highly regarded potential assessors. If all universities were to approach the potential assessor pools simultaneously the rejection rates would be very high, and the exercise could not proceed with credibility. Hence, it is proposed that the process will be staged.

In the first stage universities will provide self-assessment reports. These reports will be considered by Research Evaluation Unit of the Australian Higher Education Quality Agency. The Unit will identify areas of potential interest relating to the quality of research, for each university to follow up. Individual universities will then undertake the process of obtaining external peer assessments for those fields of research of interest to the Agency. It is envisaged that the areas of interest will vary across universities, so that the assessment burden will spread across assessor pools at manageable levels.

In the second stage, universities will report on their self-managed, external peer assessments for the fields of interest to the Agency. The Research Evaluation Unit of the Agency will have the role of validating those assessments as they become available. It is envisaged that the Research Evaluation Unit will work in cooperation with the Australian Research Council, the National Health and Medical Research Council, and other research bodies, in maintaining a database of potential assessors of research.

A university will have the opportunity to clarify points it considers have not been fully appreciated and to challenge assessments, and such comments will be included in the report that the Australian Higher Education Quality Agency provides to the Minister responsible for higher education.
6.3 Building World-Class, World-Scale Research Capabilities

Australia must deepen our research capability in some key areas in order to compete with the best universities in the world.

Insufficient public investment in research is failing to sustain research efforts and prevents Australia from building world-class, world-scale research capabilities in areas where we have the potential to compete globally.

Labor is committed to ensuring that Australia sustains appropriate breadth and depth of research capability across the nation’s range of universities and research institutes. The contributions of each institution will vary according to its mission and strengths.

By international comparison, Australia’s investment in university research is small in scale yet widely distributed. The dissipation of Australia’s relatively small-scale investment in university research hampers our ability to continue to play on the world stage in knowledge advancement. Other countries are scaling-up their research capabilities, with major infrastructure investments and incentives for attracting and retaining international stars and high quality research teams around them.

There is nothing in Australia than goes anywhere near the concentrated research capability to be found frequently in America and Europe, and increasingly in China and other Asian countries.

Many of those countries with deep public research capabilities also have large corporate R&D capabilities, and strong links between the two. Australia has very little private R&D, only spending 0.89% of our GDP in this area.

Through a major new initiative, Labor will build a select number of top quality research capabilities on a competitive international scale.

The areas for major scaling-up investment will be determined by assessment against the following evaluative criteria:

i. the quality of Australia’s research performance relative to the best in the world by field of research;
ii. the importance of the research field to national economic, strategic, social and environmental priorities; and
iii. the export growth potential of Australian processed primary products, manufactures and services, and the importance of Australian research to the development of that potential.

The building blocks of world-class, world-scale capability will include:

i. Expertise - intellectual stars to lead and build significant teams;
ii. Capacity - substantial infrastructure investment; and
iii. Linkages and Networks – flexible incentives for bilateral and multilateral research collaborations.
The program will be complemented by a funding program to enable Australian researchers to access major research facilities in other countries, such as for astrophysics and astronomy, and geosciences, and to undertake collaborative research internationally.

Some possible areas for scaling-up Australia’s research capability have been identified by the National Collaborative Research Infrastructure Strategy, such as nanotechnology, mining engineering, better health-care delivery and bio-security. PMSEIC’s Working Group on Asia has identified key areas of energy, water, agriculture and health where research capacity must be enhanced in order to build stronger relationships with China and India. 97

6.4 Science, Mathematics, Engineering and Technology
- Researcher Retention & Renewal Initiative

Labor will launch a new national initiative to address the major gap in Australia’s human capital base caused by our inability to retain and replace research-skilled personnel in the Science, Engineering, Technology and Mathematics fields.

The objective is to ensure that Australia’s researchers are of sufficiently high quality to contribute to advances in the generation and application of knowledge at the world’s top level.

The initiative will address current and emerging gaps in the skills supply pipeline, at the entry level (Bachelor degree and Doctorate education) and at critical points in the career path of professional researchers (early post-doctoral, early career post-doctoral and mid-career). The initiative will be designed to enable a commencing undergraduate student to progress along a continuing research career path, and for researchers (including those recruited from overseas) to join at different career points. In addition, there will be specially designed technical programs for Doctoral graduates delivered in collaboration with TAFE institutes.

Students will experience high quality research education at the nation’s leading universities and CSIRO. They will also have work experience placements in enterprises, and take courses in commercialisation and project management.

7. Innovation

Innovation occurs when a business introduces new products or services to the marketplace, or adopts new ways of making products or services.

7.1 New understandings of the innovation process

Current technology transfer policy typically assumes a model of innovation that is “ideas-centric”, with research seen as the source of business ideas. That may work for pharmaceuticals and some other areas, but it is not a uniform approach. In most industries, firms obtain their business ideas from their customers, their service delivery partners, and their own internal operational challenges, rather than from external R&D sources. A strong science base does not lead directly to wealth generation, and there are important roles for Government in improving knowledge flows both ways, between researchers and enterprises, and from enterprises to researchers.

The Executive Chairman and co-founder of Trinamo Ltd, Stephen Allott, has pointed to the need not only to support an ‘ideas-centric’ approach to innovation but also a “people-centric” approach, which starts with a customer problem:

“Innovation happens when bright people trained in the universities are confronted by real life company problems in urgent commercial situations. Out of this friction come solutions, which market forces will hurtle into production if they work.”

The creation and commercialisation of new knowledge is a crucial source of dynamic improvements in productivity. For advanced economies, innovation is a matter of pushing the world frontier of knowledge. For developing countries technology assimilation is the central challenge. For second world economies, like Australia, we have to do both.

Analyses of productivity growth in OECD member countries point to the importance of the international diffusion of technology. A country’s ability to absorb foreign technology is enhanced by investment in education and by investment in its own R&D:

“A country like Australia cannot rely on a strategy of passive absorption to maintain strong productivity performance. In order to benefit from the global public good of world knowledge, countries need to have well trained scientists, a technologically capable workforce and active engagement in cutting edge research.”

Australia has the competitive advantages of being open to international trade and investment, having low regulatory barriers to competition at the national level, sound

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capital markets, and a strong science base, especially in biosciences. Australia’s main competitive disadvantages are weak and deteriorating physical infrastructure; skill deficits in the labour market; limited access to venture capital; low levels of R&D investment and commercialisation infrastructure despite the strong science base.

"In terms of manufacturing industry, companies producing standardised labour-intensive products are in real difficulty," says [David] Charles, chairman of Insight Economics. "They are either gone or going. The ones that have a chance to survive are those that have something special about them in terms of innovation, design and research.”

7.2 Labor’s Innovation policy objectives

Labor will give particular attention the needs of firms to access the people and facilities they need to solve business challenges in competitive markets.

As a small country, Australia cannot match larger world competitors by continuing to thinly spread our limited resources for investment in basic research, applied research and innovation.

Others are concentrating on their competitive strengths at unprecedented levels, and we will be left behind if we do not build up our best competitive advantages to internationally recognised performance peaks.

Australia has some 30,000 exporting businesses, most of them very small by value of exports. They are likely receptors of R&D, new technology applications, process innovations and marketing improvement. They have made the important attitudinal transition and business commitment to export; and they operate in an intensely competitive environment. It is sensible public policy, at least initially, to help them boost the value of their exports. Their success will, in turn, attract other Australians to export, to the benefit of Australia.

These exporters include low and medium technology industries (such as food processing, timber products, textiles, wine, mechanical engineering and services such as transport and health) as well as high-tech industries (such as computer software, creative design, and pharmaceuticals).

Accordingly, Labor’s Innovation policy measures aim to:

- Raise the proportion of firms that are innovating;
- Raise the value of exports through increased exporter innovation;
- Address the major gaps in the national innovation system by connecting firms that need know-how with those that have it;
- Deepen Australia’s skills base for improving the capacity of firms to absorb new knowledge and adapt technologies;
- Develop intermediary services and platforms for pre-competitive development in Australia of Australian ideas;
- Increase business spending on R&D.

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7.3 Enterprise Connect

Australian businesses need access to knowledge and know-how, skills and equipment to help them find solutions to their market and customer problems, enabling them to develop new and improved products and services.

They need access to services to help them apply new research, adopt and adapt new technologies, and test new products and processes.

Lack of capacity in these areas is responsible for the loss of Australian ideas, jobs and wealth to competitor countries. Labor wants to see smart Australian ideas and products competing and winning on the world stage.

Many of the tools exist – skilled people, universities (including their graduates, researchers and infrastructure and IP), CSIRO, other public research agencies, TAFE, AusTrade, AusIndustry, State innovation systems, venture capital schemes, industry grants and other tools all have the potential to solve some business problems.

Other tools are largely missing, such as:
- pre-development testing and prototyping;
- subsidised access to quality business and management advice;
- subsidised placement of skilled graduates, postgraduates, post-doctorial researchers and TAFE graduates in SMEs to develop specialised products, processes and services.

Labor will support the initial establishment of up to 10 EnterpriseConnect innovation centres. This will involve support of up to $20 million each, over four full years, for establishment costs.

Enterprise Connect will operate as a series of regionally distributed national facilities to help Australian businesses apply new research, adopt and adapt new technologies, and test new products and processes. It is a new national innovation enabling service, targeting key industries and engaging SMEs and exporters in those industries.

Each Enterprise Connect facility will act as a link bringing together the various innovation tools in key industry sectors in Australia for the benefit of SMEs.

Enterprise Connect will serve offer structured and subsidised access of Australian SMEs to four types of services.

I. Advice/Diagnostic
- Business, management, processes, technical and training advice on improving productivity, efficiency and export value. Business advisers, technical experts and scientists will be engaged by Enterprise Connect to service its customers.
- Patent and licensing information and advice on where relevant IP is located.
II. Access/Brokerage

- Broker customised access for SMEs to researcher know-how and research facilities, equipment, intellectual property, data bases and data processing systems held in universities, CSIRO, the National Measurement Institute, other research agencies, businesses with research and testing facilities, TAFE Institutes and centres for design, as required to meet the needs of its enterprise customers.
- Facilitate access to equipment and infrastructure on a trialling basis to expose SMEs that are looking at different innovation options.
- Facilitate placement of university graduates, postgraduates, post-doctoral students and TAFE graduates with specialised skills (technical and business) into SMEs for selected collaborative projects between the SME and a university or TAFE.

III. Infrastructure - Testing/Prototyping

- Provide pre-development testing and rapid prototyping in industry sectors where these facilities are lacking. Enterprise Connect will be specially equipped with laboratories and workshops to provide world-class, world-scale platform technologies for emerging knowledge-based industries, such as advanced (bio- and chemo-) materials and micro/nanotechnology.
- Availability of the expertise to use that equipment is critical.
- House major state-of-the-art facilities and equipment for pre-testing, synthesis and rapid prototyping, computer-aided design, simulation and animation.

IV. Building industry capacity

- In order to build a knowledge and innovation culture across an industry, Enterprise Connect will play an active diagnostic role to identify and assess chronic industry problems.
- Through regular workshops, surveys and benchmarking exercises, Enterprise Connect will assess how Australian industries compare globally and target solutions accordingly.

Enterprise Connect could also be available for use by larger commercial enterprises on a fee-for-service basis, and these commercial returns on services will be used to cross-subsidise the services to SMEs.

How will Enterprise Connect be established?

Enterprise Connect will be established as a not-for-profit service. Company status would enable Enterprise Connect to respond quickly to business problems, be nimble in seeking and developing solutions and minimise red tape and bureaucracy.

Key areas where an Enterprise Connect facility would be beneficial to the Australian SMEs and the economy could include:

- Fabrication/Materials science
- Nanotechnology
- Biotechnology/Bioinformatics
- Automotive
- Mining – minerals processing, extraction, efficiency
• Energy – efficiency, infrastructure, low-emission, large-scale and alternative energy processes
• Water
• Food processing and processed agricultural products
• IT software and design
• Mapping and imaging, modelling and forecasting (tracking pandemics, tsunamis etc)

In order to target enterprise innovation needs and national priorities, Labor, in conjunction with industry groups, universities, TAFEs and public research agencies, will undertake a national survey, focusing on firms exporting in processed primary products and manufactures.

This survey will have two purposes:
• Identify industry sectors that most require Enterprise Connect to link industry and research;
• Collate research expertise, infrastructure, equipment, linkage and collaborative schemes, industry grants, State Government initiatives that could be made available to SMEs via Enterprise Connect;

This initiative will help keep Australian ideas in Australia for increasing the value of Australian knowledge exports, strengthening Australia’s import competitiveness and providing high quality jobs.

6.4 Knowledge Transfer Partnerships – putting know-how into business

Labor will establish a national scheme of Knowledge Transfer Partnerships to be placed in export and growth-oriented small and medium enterprises.

Each Knowledge Transfer Partnership Associate will work on a specific innovation project that the SME undertakes in partnership with universities, TAFE institutes, and publicly funded research agencies. An example of partnership could be joint supervision of the Knowledge Transfer Partnership Associate.

Labor’s Knowledge Transfer Partnership Associates will act as bridges to link firms with specific customer and market needs, to universities and TAFEs. With the help of educational institutions, they will:
• find and interpret scientific research and technologies,
• improve business, production and management processes,
• build and test prototypes for new products,
• oversee the introduction of new products into the markets.

Knowledge Transfer Partnership Associates will be recent graduates, postgraduates and post-doctoral researchers, as well as high-skill VET qualification holders (Diploma and higher Certificate levels). They would have science, technology, engineering or business qualifications.

The innovation projects will be developed in partnership with a relevant university or TAFE. Projects may be initiated by the business or the institutional partner.
Projects will be assessed and awarded grants by Labor’s new national innovation service, *Enterprise Connect*.

A Labor Government will provide 100 *Knowledge Transfer Partnership* grants per year at up to $100,000 per innovation project. The project could be up to 2 years. The grant could pay for part of the salary of *Knowledge Transfer Partnership* Associates and other costs incurred by the business or partner institution. This would cost $10 million per year.

*Knowledge Transfer Partnership* Associates will be based in firms and receive a normal salary. Associate placements will be targeted to industry sectors with the greatest export potential.

In addition to boosting business know-how, *Knowledge Transfer Partnerships* aim to:

- Change the culture of low-skill, low-value-added innovation in Australia;
- Break down barriers between firms, universities and TAFE – the *Knowledge Transfer Partnership* Associates would find and interpret scientific research and technologies;
- Encourage the development of niche and high-level skills in universities and TAFE;
- Increase the pool of innovative people in Australia whose skills and attitudes are attuned to industry and economic needs.
CONCLUSION

This White Paper has highlighted areas of vital importance to Australia’s future, where the current policy settings are holding us back.

The power of education is that it can transform individuals, widen their mental horizons, and build skills that help build the nation, and reinforce values and develop understandings that help pluralistic communities live well together.

Australia needs a culture of excellence in all of our universities so that we can build a modern economy able to hold its own in the world.

Our failure to innovate reflects gaps in the national innovation policy for connecting firms with the people and facilities they need to develop their products to meet market challenges.

Our productivity decline reflects gaps in the national skills formation system – not only quantitative skills shortages across many professional, paraprofessional and technical occupations and traditional trades – but also qualitative deficiencies in the skills base.

Social tensions, too, frequently reflect a reluctance of government to draw upon evidence and expertise in the development of policy approaches to complex problems.

Education can bridge gaps in understandings of differences, and thereby help avoid conflicts based on prejudice and ideology.

Australia needs sharper vision, backed up with substantive, contemporary policies that tackle our most serious problems.

Australia needs true leadership that raises our sights and lifts our spirits, promotes cooperation and builds a nation we can be proud to belong to. A Beazley Labor Government will give that leadership.
APPENDIXES

Appendix 1: Glossary of Terms

Basic Research \(^{104}\)
Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying phenomena and observable facts, without any particular application or use in view.

*Pure basic research* – is carried out for the advancement of knowledge, without working for long-term economic or social benefits and with no positive efforts being made to apply the results to practical problems or to transfer the results to sectors responsible for its application.

*Oriented strategic basic research* – is carried out with the expectation that it will produce a broad base of knowledge likely to form the background to the solution of recognised or expected current or future problems or possibilities.

Applied Research
Original investigation undertaken in order to acquire new knowledge but is directed primarily towards a specific, practical aim or objective.

Research and (experimental) Development (R&D)
Comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture, society, and the use of this stock of knowledge to devise new applications.

Science
The systematic study of humans and their environment based on the deductions and inferences which can be made, and the general laws which can be formulated, from reproducible observations and measurements of events and parameters within the universe.\(^{105}\)

Innovation
Innovation is the process that translates knowledge into economic growth and social well-being. It encompasses a series of scientific, technological, organisational, financial and commercial activities. Research is only one of these activities and may be carried out at different phases of the innovative process.\(^{106}\)

Innovation occurs when a business introduces new products or services to the marketplace, or adopts new ways of making products or services. The concept may refer to technical advances in how products are made or shifts in attitudes about how products and services are developed, sold and marketed.\(^{107}\)

\(^{104}\) Australian Research Council
\(^{105}\) Macquarie Dictionary
\(^{106}\) Australian Research Council
\(^{107}\) Canadian Economy Online
Appendix 2: The Australian Qualifications Framework

**Characteristics of learning outcomes for an Associate Degree include:**

- acquisition of the foundational underpinnings of one or more disciplines, including understanding and interpretation of key concepts and theories and how they are evolving within the relevant scientific, technical, social and cultural contexts;
- development of the academic skills and attributes necessary to access, comprehend and evaluate information from a range of sources;
- development of generic employment-related skills relevant to a range of employment contexts;
- a capacity for self-directed and lifelong learning.

**Graduates of a Bachelor degree possess a range of academic and vocational attributes such as:**

- an understanding of a systematic and coherent body of knowledge and its underlying principles and concepts;
- Communication and problem solving skills;
- the ability to undertake research, analyse information and apply knowledge and techniques learnt within an academic or professional context;
- skills for self-directed and lifelong learning; and
- interpersonal and teamwork skills appropriate to employment and/or further study.

**Graduates of a Masters degree possess a range of academic and vocational attributes such as:**

- advanced knowledge of a specialist body of theoretical and applied topics;
- high order skills in analysis, critical evaluation and/or professional application through the planning and execution of project work or a piece of scholarship or research;
- creativity and flexibility in the application of knowledge and skills to new situations; and
- the ability to solve complex problems and think rigorously and independently.

The Doctoral degree recognises a substantial original contribution to knowledge in the form of new knowledge or significant and original adaptation, application and interpretation of existing knowledge.
This substantial and original contribution to knowledge may take the form of:

iii. a comprehensive and searching review of the literature;
iv. experimentation;
v. creative work with exegesis;
vi. other systematic approaches; or
vii. advanced, searching and expansive critical reflection on professional theory and practice

A graduate of a Doctoral degree is also able to:

- carry out an original research project, or a project(s) addressing a matter of substance concerning practice in a professional at a high level of originality and quality; and
- present a substantial and well ordered dissertation, non-print thesis or portfolio, for submission to external examination against international standards.
Appendix 3: National Protocols for Higher Education Approvals

Extract from Protocol 1

“An Australian university will demonstrate the following features:

- Authorisation by law to award higher education qualifications across a range of fields and to set standards for those qualifications which are equivalent to Australian and international standards;
- Teaching and learning that engage with advanced knowledge and inquiry;
- A culture of sustained scholarship extending from that which informs inquiry and basic teaching and learning, to the creation of new knowledge through research, and original creative endeavour;
- Commitment of teachers, researchers, course designers and assessors to free inquiry and the systematic advancement of knowledge;
- Governance, procedural rules, organisation, admission policies, financial arrangements and quality assurance processes, which are underpinned by the values and goals outlined above, and which are sufficient to ensure the integrity of the institution’s academic programmes; and
- Sufficient financial and other resources to enable the institution’s programmes to be delivered and sustained into the future.”

National Protocols for Higher Education Approval Processes
Changes approved by MCEETYA, July 2006

At the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) meeting in Brisbane on 6-7 July 2006, Ministers agreed to a revised set of National Protocols for Higher Education Approval Processes.

The National Protocols were first agreed by MCEETYA in 2000, and regulate the recognition of new universities, the operation of overseas universities in Australia and the accreditation of courses offered by providers of higher education.

The revised Protocols include:

Part 1 – Introduction: Sets out the Protocols’ purpose, scope of application, goals for higher education in Australia and how the Protocols fit within the broad quality assurance framework for Australian higher education;

Part 2 – Protocols A to E:

Protocol A: an overarching framework of common characteristics applicable to all higher education institutions approved in Australia. The other Protocols set out additional criteria or specific processes which apply to particular types of institutions or authorisations;

Protocol B: non self-accrediting higher education institutions and their higher education courses;

Protocol C: awarding self-accrediting authority to higher education institutions other than universities;

Protocol D: Australian universities, including specialist universities, and university-colleges;

Protocol E: overseas higher education institutions seeking to operate in Australia;

Part 3 – Obligations on Government Accreditation Authorities; and

Glossary – Provides an explanation of key terms.

The revised Protocols include a number of new provisions, which will allow more diverse types of higher education institutions to develop in Australia, including:

- **Specialist universities**: High quality higher education institutions meeting the same requirements as other universities, with the exception of breadth of fields of study. They will be required to offer courses including research masters and doctorates, and undertake research activity, in one or two fields of study only. Very high quality institutions of this sort exist in other countries, especially in fields like the arts, medicine, IT and business;

- **Self-accrediting institutions other than universities**: Selected non-self accrediting providers, usually with a strong track record in reaccreditation, will be able to seek authority to accredit their own courses. Historically only available to universities and a small number of other institutions established by legislation, broader availability of self-accrediting status will acknowledge high quality institutions’ capacity to regulate themselves and will assist to reduce regulatory burden;

- **University colleges** – this title will be protected under the revised Protocols, reserved for use by new universities, which at point of establishment, need only undertake research and research training in one field. It may also be used by provisionally approved ‘greenfield’ institutions based on a plan, which would normally be mentored by an existing university.

- **Overseas institutions** – clearer rules around entry and their use of university title will assist more to establish a presence here and offer their own qualifications, thereby increasing choice for students.

Ministers agreed in November 2005 that the revised National Protocols would apply to both new and existing institutions. The current Protocols apply only to new institutions. Compliance will be regularly assessed through the standard quality assurance processes that apply to each institution.

The revised Protocols were agreed following extensive consultation with the higher education sector, including an independent review of the existing Protocols, led by Professor Gus Guthrie, a series of face-to-face consultations, two national workshops and two written submission processes.

The sector had the opportunity to consider and comment on a draft of the revised Protocols, with about 30 written submissions received. The draft was also discussed at a National Workshop in Melbourne in April attended by about 75 representatives of universities, other higher education institutions, peak bodies and government.

Following consideration of feedback on the draft Protocols, a number of changes were made.

The major differences between the draft circulated for comment to the sector, and the final version approved by Ministers were:
• Incorporation of provisions for specialist universities as part of the draft protocol on Universities (now Protocol D).
• Provision for mentoring by an existing university to be the normal procedure for a new university, but allowing the responsible Government Accreditation Authority to vary this requirement.
• Clarification that self-accrediting authority would normally be awarded to institutions who could demonstrate they meet the criteria through a track record or re-registration and re-accreditation in at least two approval cycles.

MCEETYA also noted the need to amend legislation to implement the new Protocols so that they take effect no later than 31 December 2007. They also agreed to the development of National Guidelines by the Joint Committee on Higher Education, for sign-off by Ministers by June 2007.