CLOSING THE GAP
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1. The Business/Higher Education Round Table’s (B-HERT) fundamental premises are:

- The status quo in higher education in Australia is not sustainable if we as a nation want to be at the forefront of a knowledge-based society.
- Universities of local relevance and global excellence will emerge from a framework of diversity and flexibility that can only be built when underpinned by coherent policy and a funds base that recognises a new priority for higher education in this country.
- Australia’s universities are under-resourced in international terms.
- Education and training are key ingredients in growing and developing the Australian economy and in overcoming societal and individual disadvantage.
- Higher education is critical to the future of this country; in creating a “learning society” in which all Australians, of whatever social, cultural and economic background, have access to a post-secondary education of excellent value.
- Access to higher education should be based on intellectual ability, not ability to pay.
- Universities have a key role in preparing graduates for their participation in a civil society.
- The need to optimise the exchange of knowledge for both public and private benefit.
- Every Australian university should have sufficient income to cover the real costs of teaching their students, supported by effective and efficient asset management, revenue raising and cost management goals and performance.

**B-HERT POLICY POSITIONS**

**Overview**

2. Higher Education is fundamental to the social cohesion, economic health, environmental sustainability, and the good governance of Australia and Australians.

3. It is one of the key enablers of societal, individual and business opportunity creation and of overcoming societal and individual disadvantage.

4. Higher Education comprises teaching, research, community outreach and engagement.

5. Whilst the main priority is education for Australian citizens, higher education is an important export earner (4th largest-$10 billion per annum), and is a strong component of maintaining and strengthening political, business and people-to-people relationships with countries and peoples in the Pacific and Asia regions.

6. Higher education should be positioned as a major educational option, together with vocational education, for school leavers and for mature age people who may want to change careers or who need a second chance.

**Higher Education Market Structure**

7. B-HERT favours a mixture of public and private (local and overseas) institutions with diverse Government, student, private sector and philanthropic funding and investment.

8. B-HERT supports the move to institutional mission diversity with funding based on institutional plans on a minimum four year cycle.

**Quality**

9. B-HERT regards quality as a fundamental issue and supports quality assurance mechanisms aimed at giving confidence that Australian courses meet Australia’s needs and are internationally competitive.

10. A market which provides student choice is an important element of driving quality.

11. Quality must be a given. There is no benefit in having ready access to mediocre universities. The sector must be able to demonstrate that it has the processes and systems in place to ensure consistency and quality of outcomes throughout the sector. In today’s environment in Australia there is a certain tension which universities and their staff feel in attempting to maintain the traditions of high quality research, scholarship and teaching.
12. The actual and perceived outcomes must be high, consistent and of sustainable quality. This is fundamental to meet the needs of Australia and Australians’ future and to maintain the confidence of our overseas students.

13. Measurement of quality should be by a mixture of stakeholder feedback, professional body accreditation and audits at both institutional and sector level. It should balance rigour with minimising bureaucracy. Universities are now significantly overly micromanaged by government resulting in lack of operational flexibility and overly corporatised management structures and higher overhead costs.

14. Universities have a responsibility to explain their purposes and to report publicly on how well they have performed against their own goals and stakeholder expectations of their performance and outcomes. This should include employee development and effective and efficient asset management, revenue raising and cost management goals and performance.

15. The current 1 in 4 ratio of overseas students to domestic students is of concern with both analytical and widespread anecdotal evidence questioning the English language capability of up to 40% of overseas students.

16. This puts at risk overall outcome quality. The learning experience of fluent English speakers is vital to ensure confidence is not reduced in Australia’s educational quality.

17. Increased government funding and diverse institution missions will have a stronger impact on quality than the introduction of additional audits and rules.

18. Work needs to be done to determine the level of business satisfaction with undergraduate and graduate courses.

Philanthropy- Increasing Private Support for Australian Universities

19. B-HERT sees philanthropy as an essential ingredient in the long-term development of Australia’s universities. In comparison with leading developed nations there is considerable scope for a much increased level of private support for universities in this country. B-HERT is pleased to note that one aspect of the Higher Education Endowment Fund (HEEF) announced in the recent Budget is that the Government plans to use the fund to encourage philanthropy. B-HERT awaits with interest the detail of how funds will be disbursed.

20. Private support is not a substitute for government base funding and it is not for maintenance of ongoing operations. It is to achieve excellence, to nurture innovation, enable diversification and support greater equity of access. B-HERT is firmly of the view that in Australia the problem is as much nurturing a culture of asking as it is a culture of giving.

21. Consolidating, growing and expanding sources of revenue will be an important step towards assuring the stability and independence of Australian universities so that they may contribute as fully as possible to a knowledge-based society. An important aspect of additional philanthropic revenue is that it will not compete with public money from other social and economic imperatives.

22. B-HERT Recommends that:

i. All involved in or benefiting from Australian higher education should be encouraged to openly express the contribution that universities have made and are continuing to make to their lives, careers and the tasks that currently face them. This should involve beneficiaries of university education, research and outreach, including alumni, captains of industry, heads of public and private sector organisations, and politicians of all political persuasions. Universities Australia (UA), the Universities Chancellors’ Council (UCC), the Business–Higher Education Round Table (B-HERT) and philanthropic peak bodies should consider what they may do to this end.

ii. UA should sponsor conferences and training and assist in the development of benchmarks for fundraising and alumni relations.

iii. University governing bodies should:

• include development in the university’s strategic plan;
• make annual budget allocations for development and review progress against fund-raising targets;
• review the roles of vice-chancellor, senior staff, chancellor and governors to strengthen their responsibilities for fund-raising.

iv. University managers should:

• include courses in fund-raising as part of university leadership programs;
• involve friends and alumni in university fund-raising;
• recognise and celebrate philanthropic contributions.

v. The Commonwealth government should provide capacity building funding for university development offices.
vi. State governments should implement mechanisms to assist universities in capacity building for fundraising.

vii. The university sector led by UA should:
   • sponsor a working party to develop standard measures of university fund-raising costs, results and practices;
   • support university Chief Financial Officers to attend conferences and receive training on the special financial requirements for the receiving, monitoring and investing of philanthropic donations.

viii. The Australian Universities Quality Agency (AUQA) should in future audits seek to identify examples of best practice in university development and fund-raising, to assist the sector to improve its performance.

ix. The Commonwealth government should provide a time-limited matched funding scheme as has proved successful in other countries.

x. State governments should implement incentive measures that use government contributions to leverage private support for universities.

xi. The Commonwealth government should examine how policy might be employed to encourage planned giving through the trust structures and tax incentives it provides.

dii. University managers through their development offices should examine and promote the use of the full suite of tax deductible gift options made available by the Commonwealth government including share gifts, gifts in-kind, and workplace giving.

xiii. Business, industry, the professions and other relevant stakeholders should identify those universities with which they have closest relations and from which they derive greatest benefit.

They should then:
   • consider facilitating workplace giving to universities and offering a program that matches employee gifts to the universities;
   • consider sponsoring scholarships, prizes, placements, facilities and/or research in areas relevant to their enterprise.

dxiv. The general public and philanthropic organisations are urged to recognise that universities need support that is independent of government core funding, and to donate funds that will assist each university to develop its distinctiveness and strengths in a manner that encourages excellence.

(For a more extensive discussion of Philanthropy refer to B-HERT Position Paper No 13 – Increasing Private Support for Australian Universities December 2006).
23. B-HERT believes that the role of government should focus on taxation policy and the provision of resources and incentives that grow fund-raising capacity.

24. It is the universities that have the responsibility for increasing private support by leadership and professional asking.

25. B-HERT’s recommendations, if implemented, will increase private support for universities and will raise an additional $600 million p.a. in 2008 dollars. It will need encouragement by Government, and will be a challenge. B-HERT is confident universities can meet.

Innovation

26. B-HERT emphasises education and innovation as the key components of the next round of Australia’s broad productivity improvement and fundamental to international competitiveness. The recent Productivity Commission Report indicates a potential impact of increased education and training of 0.7% in the workforce participation rate and 1.2% p.a. in labour productivity. The creation and commercialisation of new knowledge is a crucial source of dynamic improvements in productivity. We need to substantially enhance the level of innovation in Australia.

27. Many international surveys suggest that by world standards, Australia’s university sector is not driving innovation as well as in many competitor nations. The 2006 Times Higher Education Supplement, for example, rated one Australian university in the world’s top twenty – the Australian National University (at 16th place). Another four ranked in the top 50 – Melbourne 22, Monash 35, UNSW 41,
Queensland 45. In the 2006 Newsweek ranking of global universities, seven Australian universities ranked in the top 100.

28. According to the 2006 Shanghai Jiao Tong University’s Institute of Higher Education ranking system, Australia has two universities in the world’s top 100 – the Australian National University (54) and the University of Melbourne (78). In this survey, only six of Australia’s universities ranked in the top 200. In the Jiao Tong 2007 academic ranking of world universities by broad subject fields no Australian university appeared in the top 20. In the top 100 Australia had one in Natural Sciences and Mathematics; four in Engineering/Technology and Computer Science; four in Life and Agricultural Sciences; three in Clinical Medicine and Pharmacy; and three in Social Sciences, a total of 15. Funding needs to be changed to improve this outcome (Any conclusions drawn from these rankings need to take into account Australia’s relatively small population. The Vice-Chancellor of one of Australia’s leading universities has been reported as commenting, “Most universities in Australia offer high-quality tertiary education that meets the needs of students, employers and society. They produce a skilled and educated workforce….)

29. Likewise, Australia’s research output, measured by number of patent families per thousand capita population, is very low by international standards.

30. OECD statistics underline 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.

31. There is a need to get away from the linear ‘knowledge-push/start-up company’ fixation, which has pervaded so much policy making in the past. Anything that reduces risk or increases potential rewards will see more businesses innovate.

32. The CRCs have had many reviews of their effectiveness and contribution to Australia’s economy, business collaboration and development of intellectual property, all positive. B-HERT supports the conduct of regular reviews and recommends long term funding certainty. B-HERT believes that the CRCs should have rigorous commercial assessment processes, but believes there should be a place for some CRCs to have all or some of their mission to be directed at the public good.

![Figure 4](source: OECD Main Science and Technology Indicators 2006)
B-HERT recognises engagement is not new and all universities are already engaged with communities in a number of ways. Whilst community engagement is, and must be, a core business of universities, until now it has not received sufficient recognition as such and a legitimate funding.

B-HERT sees the key issue in building Community Engagement as mainly one of "facilitation", but supportive funding is also needed.

Additional funding is needed to enhance the facilitation process. Funding for engagement should not be at the expense of teaching or research, but must represent additional funding to have optimum impact. The key driver is human capital.

It is important that this funding is additional and is not used (either by government or universities) as a substitute for alternative sources of funding that might, or might not, be under threat.

There already exists in universities varying levels of engagement through teaching and research. Universities already engage with and add value in partnership with industry, and can demonstrate significant contributions to regional capacity building.

B-HERT considers that funding for Community Engagement activities should be provided for two main purposes:

1. **Institutional capacity building** – to establish ‘interface’ arrangements and develop skills that focus firstly on knowledge transfer and translation between universities and industry and community in priority areas. Such arrangements would reflect industry and communities needs and opportunities and should give particular attention to cross-disciplinary research outcomes.

2. **Political capacity building** – to ensure ongoing viability and sustainability. Infrastructure is taken to cover physical, human and structural capital. Non-CRC funded university research centres are a critical resource for knowledge transfer and translation. Funds could also be used to build skills and capabilities in university technology transfer offices.

Community Engagement

Universities have three missions: Teaching, Research, and Community Engagement. B-HERT uses “Community” to stress generically the various communities involved: not only business, but all communities - eg. artistic, religious, educational, sporting, charitable, indigenous, professional associations, local councils, families, etc.

The 2003 ABS Innovation Survey found that only 27 per cent of innovating businesses in Australia were involved in any form of collaboration or alliance. Furthermore, only 6.5 per cent of innovating businesses had collaborative links to universities, governments or research institutions.

There is a need in Australia for far more effective mechanisms for knowledge transfer between universities and business, particularly SME’s.
to understand how some research results about education can best be told in a story way that will be understood and acted upon by indigenous people in a broad geographic area from clans with different indigenous language groups and story lines.

45. Specific projects and initiatives – to support ‘one-off’ ventures and activities that address a specific need and opportunity and have an identifiable and measurable outcome. These should not include purely commercial ventures.

46. Institutional capability building should be provided through base funding grants or infrastructure funding arrangement for universities, allocated on a basis to be determined. This will allow universities and industry and communities to undertake knowledge exchange and translation and socio/cultural activities that they have either not been able to undertake before or have only been able to undertake in a limited way.

47. The allocation of funds to each university should recognise established industry engagement activities. In this way base funding would leverage existing Community Engagement funding from industry sources. The basis for allocation is discussed below.

48. Specific project arrangements should be based on a competitive process where universities or associations of universities, industry organisations, community organisations, and local government have identified initiatives that will, with financial support, achieve identifiable economic, industry and societal outcomes. Funds should be allocated on a competitive basis having regard to economic, industry (productivity and competitiveness), social/cultural, and sustainability outcomes.

49. Any competitive bidding should not impose unreasonable burdens in the bidding process.

50. The project category will provide support for universities, businesses, NGOs, community organisations and individuals, and local government to develop collaborative projects at a local and regional level with a view to achieving sustainability in engagement strategies, structures and processes over the longer term. All external contributions would be included in the performance base for subsequent allocations under the block grant component.

51. Grants for specific projects could also contain a component where a regional university wishes to take on a specific developmental initiative and there is an absence of industry or community partners.

52. The larger proportion of funds should be allocated under base funding grants or infrastructure funding arrangements. The extent of this funding could be awarded as a percentage applied to the university’s project funding for Community Engagement activities. It would be a matter for universities to determine allocations of that funding within a framework and guidelines established by the funding body. Annual performance reports would be prepared and a monitoring and evaluation framework established.

53. In managing the application of funds, consideration should be given to utilising mechanisms, several of which are already in use, which optimise the benefits to be derived by both the university or research organisation and the industry collaborator.

54. It is not expected that funds would duplicate or overlap existing arrangements that focus on, or emphasise research outcomes (such as the ARC Linkage Program).

55. Acknowledging that measurement of outcomes is generally more useful than measurement of inputs, it is nevertheless useful in this area to focus on the measurement of the extent of Community Engagement activity, rather than the impact of each category of activity. Impact data in this area are, according to the Social Policy Research Unit of the Russell Group of universities in the UK (SPRU), ‘extremely skewed, uncertain and often attributable to serendipity’.

56. B-HERT recommends that Community Engagement funding be based on:

- A funding program that has two elements: a base funding grant component and a component for specific projects;
- The base funding grant component be directed towards capacity building within universities to facilitate exchange and translation processes;
- The base funding grant be allocated to universities on the basis of performance in community engagement activities;
- An allocation for specific projects be assessed according to developmental criteria and allocated on a competitive basis;
- It would be expected that project support would be sustainable over the longer term with contributions from communities, including business and industry, being reflected in the performance base for base funding grant allocations.
57. Community Engagement funding should not be seen to duplicate or replace competitive funding for cooperative and collaborative research provided by granting agencies; Community Engagement funding should not replace grants programs administered and funded by Government agencies for which universities may be eligible (for example, Sustainable Regions Program, Natural Heritage Trust).

(For a more extensive discussion of Community Engagement funding refer to B-HERT Position Paper No. 11 - Universities’ Third Mission: Communities Engagement June 2006)

58. Effective knowledge exchange (“knowledge exchange” is a more appropriate phrase than the more commonly used “knowledge transfer” as the former recognizes the mutuality of the process) in Australia is hindered by two main factors. One of these is low levels of interaction between SMEs and HEIs/PFRAs (Publicly Funded Research Associations). This is the major weakness in the Australian knowledge exchange system. Low levels of such interaction perhaps represent a lost opportunity for higher growth rates and higher rates of value added activity by Australian SMEs. In turn this represents a lost opportunity for higher rates of economic growth in Australia.

59. It is interesting to note here that the recent ABS study, Innovation in Australian Business 2005, indicates that innovating businesses with fewer than 100 staff access Government funding to support their innovation activities at less than half the rate that business employing over 100 staff do. Only around 3.5 per cent of businesses employing under 100 staff report accessing either Federal, State or Local funding compared to 7.6 per cent of innovating businesses that employ over 100 staff. This perhaps highlights the current difficulties SMEs face in accessing the often administratively complex support programs provided by Government.

60. The second major problem is suboptimal HEI/PFRA intellectual property commercialisation practices and outcomes. The key point in relation to HEI/PFRA commercialisation systems is while there are some remaining issues identified regarding intellectual property management and information availability barriers, these barriers to knowledge exchange are not intractable.

61. In a recent report Insight Economics proposed actions designed to address the root causes of the major weaknesses within the Australian knowledge exchange environment. They involve two core and two complementary areas for action as follows.

62. **Core actions**

- Changing incentives for researchers and research institutions to encourage more engagement and responsiveness to the needs of SMEs.
- Better supporting SMEs innovation capabilities.

**Complementary actions**

- Improving HEI/PFRA commercialisation practices.
- Addressing problems with information flows.

B-HERT supports these suggestions.

**Business/University Collaboration**

63. A critical factor is to increase and enhance the involvement of business in higher education in this country. To do this there are a number of aspects which are being and need to be canvassed.

a. How to expand the range of ways business and higher education and training engage each other to enhance capacity for mutual growth and development at regional, state and national levels.

b. The need to develop new strategic partnerships and forms of involvement including more effective knowledge exchange.

c. The need for universities to embrace more fully their “third role” of community engagement and leadership, in terms of their role in a region’s social, economic, and cultural development. The various ways in which business can support, collaborate with and benefit from this engagement.

d. The possible need for other forms of university governance.

e. Staff and students within universities need to be encouraged in their efforts to engage with industry, and there needs to be an increased acceptance and rewarding of such efforts.

f. Establish more large-scale research centres through research partnerships (US- private funding; Irish and Finnish- targeted state funding).

g. Better commercialisation.

h. Enhanced R&D allowances for university/business linkages.

**Student Access, Participation and Support**

64. B-HERT believes students should have access to both publicly funded and privately funded institutions and
should be supported by government in whatever institution and course to which they gain access.

65. The number of available places should be determined by a combination of local and national areas of skills shortages, individual qualifications and knowledge upgrade, local community and business needs and individual institution mission.

66. Institutions should have the flexibility to alter their course offerings to meet changing needs. Government has a role to play especially in avoiding duplication, but needs to balance its input so as to avoid and reverse the current level of micromanagement and apparent inflexibility.

67. Whilst tertiary entrance score is and should be the main determinant of course access, universities should have flexibility to offer HECS and scholarship places on a range of other criteria, providing quality is not weakened.

68. B-HERT supports the urgent need to improve graduation rates for indigenous students, and professional development and capacity building for indigenous staff, by providing appropriate incentives for institutions.

69. B-HERT supports encouragement of students into particular courses and universities with lower HECS replaced by higher government funding. Examples include regional universities and skills shortage areas like science, mathematics, engineering, education and nursing.

70. Universities should be open to fee paying overseas students with associated benefits of cultural diversity, international relations and export income. However, places for overseas students should not be at the expense of local students. Overseas students should not threaten system quality or materially change the way courses are delivered. They also should have a high level of spoken and written English.

71. Unless a funding model is implemented which does away with up-front fees and thereby removes the contentious issue of full-fee paying domestic students, B-HERT supports universities being able to enrol domestic full-fee paying students as they provide additional funding for the sector and can provide the opportunity for an additional student to obtain a HECS place, and supports the removal of the cap on the number of full-fee degree students. However, places for domestic full-fee paying students should not be at the expense of non full-fee paying students, and should require an entrance score which does not dilute quality and standards.

Figure 6

Proportion of full-time students who work during semester: 1984 – 2000

Source: AVCC
72. If overseas and domestic full-fee paying students gain access to courses and institutions at lower entrance scores than for HECS places, these places should be available to non full-fee paying students with the same HECS score.

73. B-HERT believes that the additional funding and additional access to HECS places (vacated by a domestic full-fee paying student) outweighs this aspect of equity.

74. Students should not spend too much time in employment during their full-time course in deprecating their educational experience. Recent research (2006) reveals that the proportion of full-time undergraduate students in employment at some stage during the year increased from 78.1 per cent in 2000 to 85.1 per cent in 2006, while the number of part-time undergraduates in employment dropped slightly. Overall, the number of undergraduate students in employment rose from 80.6 per cent in 2000 to 85.5 per cent in 2006. Moreover, up to 54% of students believe paid work adversely affects their studies.

75. B-HERT supports extending income support to students during their undergraduate studies, particularly students in regional universities who are unable to access part-time and vacation employment and whose family circumstances often can be significantly impacted by the drought and rural downturn.

76. B-HERT supports availability of support like FEE HELP for students at private universities and other private providers and for students undertaking higher education course at vocational education organisations, public and private.

77. Students should be encouraged to participate in university activities beyond academic study and should have access to counselling and child care with financial support for disadvantaged students. A review should be undertaken on the impact on these activities of the introduction of voluntary student union fees with top up funding where required.

Funding

78. Total education funding, higher education funding and Commonwealth government funding of higher education should at least keep pace with GDP growth.

79. Australia is conspicuous as one of the few countries in the OECD in which the shift to private funding of universities has been accompanied by a fall in levels of public expenditure in real terms. This trend is demonstrated well by the chart in Figure 7, taken from a 2005 Productivity Commission study of the economic implications for Australia of its ageing population. It shows the slowing of growth in total funding per domestic student since 1997 despite the increases in HECS levies that have occurred since then and the rapid expansion in revenue from other private sources.

80. Universities have been significantly under funded for the past decade, resulting in increased student/staff ratios, reduction in the number and range of courses offered, and universities being overly focussed on sourcing funding and additional students.

81. Commonwealth government funding in particular has been inadequate for public universities and has lead to an over-reliance on increased HECS, overseas full-fee paying students and local full-fee paying students. Removal of mandatory student fees has taken a further $500M p.a. out of the system with minimal replacement.

Figure 7
Growth in Real University Funding per Domestic Student and per Capita GDP

Figure 8
Sources of University Income 1996–2003
82. HECS is becoming an increasing burden for students. As a result of substantial fee increases, university students now face the prospect of a large, long-lasting debt burden after they undertake their studies. Students are now paying around $20,000 for a science degree, $40,000 for a law degree and almost $15,000 for an arts degree. Since 1996-97, the debt burden for university students has more than tripled from $4.5 billion to nearly $13 billion in 2005-06. Further study is needed to determine whether selectively reducing HECS increases demand and enrolments in those courses affected. Strategic HECS debt remissions are options that should be considered.

83. However, any plan to decrease student contributions will require the Commonwealth to make up this shortfall in funding. B-HERT is disappointed that in the recent Budget the funding per student for business disciplines was reduced. In many business related areas, for example accounting, this will exacerbate existing skill shortages. There is little doubt the burden will be passed on to students. It will also serve as a disincentive for students who were weighing up the benefits of different degrees. There is also the danger that quality in these courses could be adversely affected.

84. B-HERT would ideally not wish to see HECS levels increase above their current levels for many years. However, in the absence of proper indexation and adequate public funding to support the teaching, research and knowledge transfer activities more generally, it is inevitable that additional funding will be required from private sources.

85. B-HERT supports a significant Commonwealth government funding injection, funding indexation, more targeted HECS at levels somewhat lower than now prevails, a significant increase in philanthropy, reduction in the reliance on both overseas and local full-fee paying students, and income derived from sensible commercialising of intellectual property.

86. B-HERT supports the view of “regional” universities that consideration be given to reducing HECS rates for full-time, undergraduate students who attend universities which are headquartered in regional Australia as a mechanism for redressing the net migration flow of people, especially younger Australians, from regional and rural areas to the capital cities.

87. It needs to be recognized that approximately three in every four regional students, and three in every five metropolitan students, who attend regional universities on a full-time basis for their undergraduate degree find their first full-time employment in regional Australia following graduation.

88. B-HERT supports the maintenance and enhancement of 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.

89. B-HERT’s guiding principles for institutional funding are:
   • 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.
   • 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. This includes effective and efficient asset management, revenue raising and cost management.

90. Differential funding is appropriate and other factors which might be considered in this context are -
   • Historical differences
   • Multi-campus institutions
   • State/regional differences

91. B-HERT is of the view that the current cluster mechanism of funding is inflexible in responding to market changes or in encouraging innovation.

92. B-HERT strongly recommends the abandonment of cluster funding to achieve greater flexibility.

93. B-HERT supports private investment in university infrastructure, buildings and equipment with ownership reverting to the university at the end of the investment period.

94. Work needs to be done for overall and institutional new funding models to replace the current model.

95. B-HERT strongly recommends that the Government uses the measure of its investment in higher education as a proportion of Australia’s GDP as one of its key performance indicators and as a realistic and relevant measure of global competitiveness.
99. Australia has been the only developed country to reduce its public investment in tertiary education over the last decade. Since 1995, Australia’s public investment in universities has gone backwards by 7 per cent, compared with an increase by other OECD countries of 48 per cent. The university sector has experienced especially significant reductions in public investment in the past decade, since higher education outlays were initially reduced by $1.8 billion in 1996.

96. Australia’s expenditure on higher education declined from 1.7% of GDP in 1995 to 1.5% in 2003, with government grants declining from 0.9% to 0.65% of GDP. B-HERT recommends that the Government set itself the target of reaching 1% of GDP no later than 2020 and preferably by 2015. This means that Government grants would have to increase by some 60% in the next 13 years.

Government commitment to higher education income has fallen from 60% of the total in 1996 to 40% in 2006 and this is now one of the lowest percentages in the OECD.

97. To enable universities to better balance student loan and funding, B-HERT strongly recommends that funding be on a four year period (as it is in the UK).

98. On the basis of international comparisons Australia fares poorly as the following tables show.

99. Australia has been the only developed country to reduce its public investment in tertiary education over the last decade. Since 1995, Australia’s public investment in universities has gone backwards by 7 per cent, compared with an increase by other OECD countries of 48 per cent. The university sector has experienced especially significant reductions in public investment in the past decade, since higher education outlays were initially reduced by $1.8 billion in 1996.

100. These constraints are reflected in the fact that student fees and charges that accounted for 11 per cent of revenue in 1994, contributed 22 per cent by 2005, while university dependence on international fee income increased to 15 per cent of total revenue.
Indexation

101. B-HERT strongly supports appropriate indexation for university recurrent funding. Each year the Government indexes universities’ operating grant to reflect cost increases in providing university teaching and research. If the rate of indexation falls behind the real rate of cost increases, then there is an effective cut in resources. Over a long period, the cut can build to substantial proportions. Until 1995, university operating grants were adjusted to reflect actual movements in salary and non-salary cost movements. From 1996 new arrangements associated with enterprise bargaining were introduced. The salary component of Operating Grants (75%) is indexed by the Safety Net Adjustment paid to low income workers and the non-salary component (25%) is indexed according to the Treasury’s Measure of Underlying Inflation (a modified version of the Consumer Price Index). Accordingly, from the start of 1996, as per decisions taken in 1995 by the then Labor Government, the Government has not indexed its grants to reflect actual cost increases. The Commonwealth has been explicit about this: “The Cost Adjustment Factor (the factor used to adjust grants) does not reflect the actual price movements, but shows what increases the Commonwealth has provided institutions each year toward the increases in salary and non-salary costs.” (Higher Education Funding Reports).
102. These arrangements mean that university purchasing power is reduced each year, over and above any changes to Government funding. This is a priority issue for universities struggling to maintain quality in the face of growing expectations and pressures and downturns in international and domestic demand.

103. The government funding framework is not a sustainable mechanism by which to support Australia’s higher education system in the longer term. Under current legislation the Government provides no capacity beyond 2007 for further real increases in public funding and restricts institutions from obtaining additional revenue from student fees. If the costs involved in providing internationally competitive education services remained constant or declined with the passage of time this would not be a problem.

104. However, staffing, infrastructure and other core costs invariably increase over time. While universities can continue to pursue productivity gains through innovative approaches and effective management practices, cost cutting can only go so far before it begins to impact on the quality of service provision. An example is the 50% increase in student/staff ratios over the past decade.

105. Therefore, in the absence of indexation arrangements that reflect the cost increases they face, Australia’s universities will be left with little choice but to again seek one-off increases in Commonwealth and student contributions. The existing index is not realistic.

106. It should also be recognised that we are currently in a position where demand for higher education is relatively weak, due to buoyant economic conditions, and where there are indications there is little unmet demand. So the issue is not funding for more students, it is funding for quality, excellence, access, and student support.

107. Ongoing pressures arising from inadequate indexation have been masked by growth in HECS and fee-paying (particularly overseas student) revenue. The weakening of the latter, and a looming wave of academic staff retirements, pose substantial challenges for public funding of higher education. These challenges will be amplified if the public financial situation changes in the years ahead – we cannot indefinitely expect the resources
boom to continue. In short, the parameters relating to
public support of higher education will in all likelihood
be unlike those applying to the current situation.

108. According to UA, funding for universities by 2004 was
$586 million less than it should have been using an
appropriate index (see Figure 14). This is nearly 10% of
universities’ core education funding. By 2008, this gap will
be between $800 million and $900 million. This means
that over a decade the accumulated deficiency is of
the order of $5 billion dollars.

Demographic Growth

109. One aspect that will have a critical impact on future
funding is the population shifts that are forecast to occur
over the next 20 years. As the above graph illustrates,
Australia’s current and projected age structures are not
regionally uniform.

110. Future growth in 19-20 year olds over the next 20 years is
likely to range from some 17% in the Northern Territory,
12% in Queensland, 7% in West Australia, down to
minus 26% in Tasmania, minus 13% in South Australia,
and negative growth in both Victoria and the ACT. New
South Wales remains fairly static.

111. The variations will place quite different demands on
educational services in different areas and there will
need to be a mechanism to factor this in to funding
decisions.

Educational Pathways

112. Higher Education is part of a spectrum of education.
Prospective students enter universities direct from high
school, following vocational education, from and during
employment, and graduates undertake post graduate
education, vocational education or enter the workforce.

114. The nation needs both vocational education and training and higher education. Each sector should have its own distinctive mission and characteristics. It is essential that there be adequate pathways and effective co-operation between the two sectors so that it appears as a coherent system for the students. Each year thousands of students move between the two sectors.

115. The issues needing to be addressed include –
- Linkages of VET and universities.
- Non-award courses.
- More demand driven, less supply driven.
- School linkages.

116. B-HERT urges the government to address these issues with a sense of urgency as they are and will become increasingly important.

117. University and business feedback indicates that too many students on leaving school are not sufficiently numerate or literate for their higher education studies.

118. B-HERT supports high school preparation for students aimed at both university and vocational education, including vocationally based year 12 certificates and school based apprenticeships.

![Figure 16: Student flows: VET and Higher Education 2000](Source: ANTA 2000)

![Figure 17: Year 12 Completion Rates](Source: Ministerial Council on Employment, Education Training and Youth Affairs. National Report on Schooling, Australia, various)

![Figure 18: Award Course Completions for Indigenous Students by Broad Field of Education, 2001 to 2005](Source: Department of Education, Science & Training – Higher Education Statistics)

<table>
<thead>
<tr>
<th>Broad Field of Education</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural and Physical Sciences</td>
<td>53</td>
<td>32</td>
<td>53</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Information Technology</td>
<td>14</td>
<td>21</td>
<td>21</td>
<td>26</td>
<td>9</td>
</tr>
<tr>
<td>Engineering and Related Technologies</td>
<td>14</td>
<td>28</td>
<td>16</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Architecture and Building</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Agriculture, Environmental and Related Studies</td>
<td>20</td>
<td>26</td>
<td>28</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>Health</td>
<td>202</td>
<td>194</td>
<td>218</td>
<td>192</td>
<td>228</td>
</tr>
<tr>
<td>Education</td>
<td>205</td>
<td>237</td>
<td>273</td>
<td>266</td>
<td>254</td>
</tr>
<tr>
<td>Management and Commerce</td>
<td>103</td>
<td>115</td>
<td>120</td>
<td>130</td>
<td>120</td>
</tr>
<tr>
<td>Society and Culture</td>
<td>354</td>
<td>391</td>
<td>380</td>
<td>421</td>
<td>425</td>
</tr>
<tr>
<td>Creative Arts</td>
<td>90</td>
<td>92</td>
<td>107</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>TOTAL (a)</strong></td>
<td><strong>1,045</strong></td>
<td><strong>1,128</strong></td>
<td><strong>1,191</strong></td>
<td><strong>1,195</strong></td>
<td><strong>1,205</strong></td>
</tr>
</tbody>
</table>

(a) The data takes into account the coding of Combined Courses to two fields of education. As a consequence, counting both fields of education for Combined Courses means that the totals may be less than the sum of all broad fields of education.

119. Australia’s year 12 or equivalent completion rates have plateaued or dropped in recent years and are below many comparable countries.

120. B-HERT supports high levels of year 12 or equivalent completion rates with appropriate incentives and counselling. Similarly, there has been no significant improvement in the number of indigenous students completing their higher education, as Figure 18 shows.

A recent ACER Report (April 2007) showed that only 31 per cent of Indigenous students had completed their first course by 2004, and only 33 per cent had completed any course.

121. B-HERT is becoming increasingly alarmed about the impending shortages, both in numbers and capabilities, of engineers and scientists and hence strongly recommends action to address these problems.

122. There is a problem in the schools which must be addressed. Far too many students are completing secondary schooling after having dropped the science and mathematics subjects required for university entry. This is a critical issue and needs to form part of education policy.

123. B-HERT sees expansion of Associate Degree programs as one way of fast-tracking students into higher education and addressing skills shortages.

124. Articulation between universities and the VET sector is important and the commitment to additional associate degree funding recognises the need for higher skill levels and the large current skills shortage. The quality assurance mechanism for these courses needs to be of the same rigour as currently applies to other higher education courses offered by universities and non-university higher education providers.

125. Associate degrees have been the subject of some contention among education providers over recent years, and care needs to be taken that take-up is not too supply-driven, where public funding is involved. In the commercial fee for service area in universities and non-university higher education providers, competitive neutrality principles should be the sole determinant of outcomes.

126. B-HERT is also supportive of universities which wish to follow the Bologna process.

127. B-HERT supports student encouragement to undertake post graduates degrees with a combination of FEE

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**Figure 19**

Gross Domestic Expenditure on R&D in OECD Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>4.5</td>
</tr>
<tr>
<td>Finland</td>
<td>4.0</td>
</tr>
<tr>
<td>Japan</td>
<td>3.5</td>
</tr>
<tr>
<td>France</td>
<td>3.2</td>
</tr>
<tr>
<td>Austria</td>
<td>3.0</td>
</tr>
<tr>
<td>Germany</td>
<td>2.5</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.0</td>
</tr>
<tr>
<td>Iceland</td>
<td>1.5</td>
</tr>
<tr>
<td>United States</td>
<td>1.0</td>
</tr>
<tr>
<td>Total OECD</td>
<td>0.5</td>
</tr>
<tr>
<td>Australia</td>
<td>0.0</td>
</tr>
<tr>
<td>EU25</td>
<td>0.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.0</td>
</tr>
<tr>
<td>Norway</td>
<td>0.0</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.0</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.0</td>
</tr>
<tr>
<td>Spain</td>
<td>0.0</td>
</tr>
<tr>
<td>Italy</td>
<td>0.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.0</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.0</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.0</td>
</tr>
<tr>
<td>Greece</td>
<td>0.0</td>
</tr>
<tr>
<td>Poland</td>
<td>0.0</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>0.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: OECD Main Science and technology Indicators 2006
HELP and scholarships, some of which would be financed through targeted philanthropy.

**Research Capabilities**

128. Significant under-investment in Australia’s research capacity has played a crucial role in Australia’s poor research outcomes. Investment in research and development in other OECD countries is around a quarter higher than in Australia, which invests only 1.77 per cent of GDP.

129. UA has recommended that Australia pursue a national innovation strategy that includes, among other targets, the goal of increasing Australian investment in research and innovation to 2 per cent of GDP by 2010 and to 3 per cent of GDP by 2020.

130. This would require a significant increase in the number of engineers and scientists to be graduated and injected into the higher education sector.

131. B-HERT has significant concerns with respect to the Research Quality Framework (RQF).

132. It appears to undermine the traditional and fundamental nexus between teaching and research and jeopardise the training of the next generation of researchers. Moreover, future funding many years into the future would be based on recent performance. Institutional performance in 2001 will still be influencing funding outcomes in 2014.

133. The Productivity Commission has also expressed concerns about disincentive effects and high administrative costs.

134. If the RQF is to be mounted, B-HERT supports UA in its recommendation that there be a rigorous process of development of the RQF, with financial support provided by government, including the implementation phase, in such a way that it does not threaten or diminish Australia’s quality research effort.

135. B-HERT supports the restoration of the independence and integrity of the Australian Research Council through an independent board.

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**Figure 20**

Research Project Grant Funding and Research Infrastructure Grant Block Funding 2000 - 2006

![Graph showing Research Project Grant Funding and Research Infrastructure Grant Block Funding from 2000 to 2006](image)

Source: UA

Data Sources:
1. Unipay system statistics, 2000 to 2006 (ref. RIBG)
2. DEST Science and Innovation Budget tables 2006 (ref. ARC & NHMRC Funding)
Research Training

136. Training of researchers and innovators is a central role of universities. The importance of this human capital cannot be overstated. The RQF, in particular, runs the risk of focusing on past research success rather than supporting development of researchers and new research.

137. B-HERT supports the argument that research training places should be allocated only to those institutions with strong research infrastructure and a proven research capacity, where the quality of research performed within the university reaches high standards.

138. The development of human capital is an especially wise investment; and B-HERT urges a strong commitment by government to continuing and increasing the funding and support available for research training.

139. Research infrastructure is supported by the Research Infrastructure Block Grants (RIBG) Scheme. At present, infrastructure support is not keeping pace with project funding provided under the ARC and NHMRC grant schemes. As can been seen in Figure 18 below, ARC funding more than doubled from 2000-01 to 2005-06 (an increase of 120%). NHMRC funding has increased by 38% since 2003 over this period. Infrastructure funding has not kept pace with increases in project grant funding.

140. The role of infrastructure in the innovation system cannot be overstated: without sufficient research infrastructure there cannot be an innovative research system. In this context the announcement in the 2007 Commonwealth Budget of the creation of the Higher Education Endowment Fund (HEEF) with an initial contribution of $5 billion is warmly welcomed. It will provide an ongoing revenue stream (initially $300-500 million annually) for capital works and research facilities, and B-HERT supports further government contributions in the future to augment the Fund.

Academic Staff

Finally, one factor underpins many of the outcomes of the above— the quality of the academic staff. The Group of Eight in their recent policy proposal noted, “The academic profession in Australia has lost its attractiveness to young intellectual talent. Career options are uncertain for early and mid-career researchers who depend largely on grants for short-term research projects.

Too many talented researchers, who could form the base for the next generation of Australia’s research capability, are being lost to the system. Our top talent is being poached overseas. We are finding it increasingly difficult to provide competitive environments for leading researchers in terms of state of the art research infrastructure, communications environments and critical mass of expertise. The problem is particularly marked in the (STEM) fields of science, technology mathematics and engineering.

The productivity of our scholars is masking the fragility.

All this is happening while we are undergoing generational change in the academic workforce28, and when the nature of academic work itself—in teaching and research and relations with civil society—is being transformed.

The ability of universities to attract and retain quality staff will depend not only upon the conditions of employment they can offer but also upon the culture of the university community, the opportunities to interact with colleagues and the quality of the available research infrastructure and educational facilities.

Greater stability and certainty in the policy environment for higher education and research would also help to improve morale and confidence in the scholarly community.”

B-HERT strongly supports these sentiments and sees this as one of the major societal issues to be resolved—restoring the primacy and value of the teaching profession in general.