Higher Education at a Tipping Point

Higher Education Taskforce
Output and recommendations of Committee for Melbourne Higher Education Taskforce examining issues surrounding the future of higher education in Melbourne and providing recommendations for implementation by business, government and universities.

20 August 2007
Report by the Higher Education Taskforce Group
Higher Education at a Tipping Point

Addressing the issues facing Melbourne’s higher education sector must become a priority for State and Federal Government, the business community and the tertiary institutions themselves. The future of higher education is crucial to the fabric of the city, the creation of a strong skills and capability base and the development of opportunities for industry and society.

“Higher Education in this city is at a critical point and it requires urgent and coordinated action by government, business and the higher education sector to stem the risk of losing our position as one of the world’s best university cities”,

Mr. George Pappas, Chairman of the Committee for Melbourne and Higher Education Taskforce convenor.

“Our universities contribute one-quarter of Victoria’s research & development spend. They also educate knowledge workers and innovators – the human capital for which companies and regions increasingly compete.”

Mr. Michael Andrew, Australian Chairman of KPMG and Co-Chair of the Higher Education Taskforce

“The business sector needs to pursue its own initiative rather than relying on government. We need closer relationships with tertiary institutions, and be prepared to provide scholarships and fund teaching positions, as well as make a greater contribution to facilities and physical assets.”

Mr. David Miles AM, Deputy Chairman of the Committee for Melbourne and Co-Chair of the Higher Education Taskforce
1. INTRODUCTION

With a value of $1.7b in 2004-05, higher education is one of Victoria’s largest exports. It is a key driver of research and development, the provider of a skilled and educated workforce and a major contributor to the city’s liveability and socio-cultural fabric. Higher education is unarguably a key factor in Melbourne’s current and future prosperity and plays an important role in positioning Melbourne globally, as validated by its #5 world ranking in the newly established University City Index. To maintain and improve that ranking, however, the university sector faces some very real challenges.

The temptation could be to leave things as they are on the assumption that our current economic and social success will continue. Positive indicators such as high foreign student numbers and a strong economy may be masking the true extent of a higher education tipping point. The warning signs are apparent: skill and capability shortages, limited growth in innovative, high prospect businesses, questions in the international student market on the quality of our higher education system, and a growing chorus from the private sector and academia on the need to act now to prevent irreparable, long-term damage.

Recognising the urgency and scale of the issues, the Committee for Melbourne1 drew together leaders from business, academia, Government and civil society, launching the Higher Education Taskforce in May 2006. The Taskforce’s primary objectives were to identify the key threats and opportunities facing our higher education sector and to develop a series of consensus-based, concrete and realistic responses to be implemented by business, Government and tertiary institutions by December 2008.

The Taskforce concluded that higher education is at a tipping point due to: declining levels of Government investment; low private sector engagement and investment; regulatory constraints; outdated structures and administration; and, increasing overseas competition.

This paper identifies specific actions that will serve to redress gaps and develop unique opportunities in Victoria. In part, it addresses symptoms of a flawed model. For the longer term, the Taskforce considers that the current “tinkering” approach to the issues of funding and governance is simply not sustainable. It requires a fundamental review from first principles, if the important objectives of higher education are to be achieved.

In summary, Melbourne is performing well at present, but is faced with intensifying competition and a range of structural and funding issues, which could see its higher education sector at risk of decline. A decline would prevent Melbourne from achieving its full potential as one of the world’s leading cities. It would also have far-reaching effects on direct export earnings, government tax receipts, employment, liveability and, most importantly, Melbourne’s ability to future-proof its economy through the growth and development of innovative and profitable businesses.

Through the Taskforce process, the Committee for Melbourne has proven that business, academia, government and civil society can work together to create a forum for partnership that enhances the contribution of higher education to society. Building on this success, the Committee for Melbourne has committed to hosting an annual forum of key Melbourne business leaders and Vice-Chancellors and to undertake annual feedback surveys of its members to provide ongoing information to universities and government.

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1 Details of the Committee for Melbourne’s role in this study, the Taskforce members, and the methodology adopted are set out in Appendices 1, 2 and 3 respectively.
Figure: Higher Education Taskforce Recommendation Categories

- Recognition within State and Federal government
- Effective partnerships between universities and industry
- Funding and governance
2. RECOMMENDATIONS

The Taskforce has developed eight priority recommendations. The analysis underpinning these recommendations is set out in section four. Each recommendation aims to improve the efficiency and effectiveness of the sector in meeting the objectives of higher education and enhancing Melbourne’s reputation.

Effective partnerships between universities and industry

1. **Universities, business and governments must improve liaison capacities**, which proactively engage education providers and beneficiaries of education in course content and design. **Major private sector employers should have a role in** developing courses, graduate capabilities and research programmes that are aligned with society, industry and commercial requirements.

Recognition within State and Federal government

2. The State Government should be instrumental in marketing Melbourne as a global university city. This will require additional investment in, and support of, common marketing programs and co-ordination between universities and organisations promoting Melbourne as an educational destination.

3. Given the national importance of Melbourne’s universities, the **State and Federal ministerial and departmental arrangements** for higher education should be restructured to create clear accountabilities and governance arrangements that best align with the objectives of higher education. The responsible Minister should be given a more specific role and responsibility for higher education with the appointment of a State Parliamentary Secretary for Higher Education to ensure clear links are coordinated across the whole of government and its agencies. Coordination is required across finance, transport and planning.

4. **Public transport planning and pricing** should reflect the critical importance of the higher education sector to the economy, as well as recognising the needs of students.

5. **International students must be supported** for their large financial contributions to the higher education sector as well as their value as ambassadors. The State Government should fund 100 postgraduate international scholarships for the best and brightest in areas of excellence across disciplines and resolve issues that detract from the experience of international students.

Funding and governance

6. The way that universities are funded is inefficient and undermines the sector’s ability to meet its objectives. The **sector requires a fundamental review of the policy framework, working from first principles to build a** new funding model that delivers moneys based on merit and national interest, within a co-operative Federal system. In the **short term, innovative State-based solutions** (such as a reinvestment or abolition of payroll tax for universities) **should be employed** to counter the overall decline in Federal Government funding. The State Government is primarily responsible, with universities, for university governance arrangements, but it should also be required to make real financial investment for their well-being.

7. **Best practice must be instated in the governance of Universities and** the size, qualifications and relevance of university boards and advisory councils should be reassessed to improve their effectiveness and connectivity to commerce and government.

8. Melbourne must continue to attract leading, internationally recognised academics to teach and conduct research at its universities. To that end, **funding for the Victorian Endowment for Science, Knowledge and Innovation (VESKI) should be significantly increased** and the organisation should be given more control over that funding.

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2 These recommendations were chosen based on their importance and the ability of the Committee for Melbourne to have an impact.
3. OBJECTIVES OF HIGHER EDUCATION

The objectives of higher education are multidimensional: the sector contributes to the fulfilment of human and societal potential, the advancement of knowledge and social and economic progress. Principles sought for a higher education system include creating institutions that are value-adding, research focus, learner-centred, high quality, equitable, responsive, diverse, innovative, flexible, cost-effective, publicly accountable and socially responsible.

Australia needs a higher education sector with a wide diversity of institutions fostering the flexibility to pursue their own distinctive missions and to develop innovative responses to opportunities which arise. The Federal Government points to objectives of global competitiveness, diversity and flexibility, stating that “Australia needs a vigorous, diverse and flexible higher education sector if it is to successfully lead in a competitive global environment and make the most of opportunities at home.”

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5 These themes are also reflected in recent United Kingdom developments. See for example United Kingdom Government’s 2003 White Paper *The Future of Higher Education*, on plans for reform and investment in universities and HE colleges.
4. Stakeholders of Higher Education

Ensuring that higher education is provided as efficiently and effectively as possible is critical to satisfy current and future needs of society. The key stakeholders, their interests and areas of influence can be categorised as follows:

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<th>Stakeholder</th>
<th>Interest/influence</th>
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| **Students** | Current Higher education quality, accessibility, affordability, relevance; institution’s reputation (as precursor to employment, further studies); social/community support systems  
Alumni Institutional reputation, further study opportunities; as ambassadors |
| **Higher Education Sector** | Academic staff Institution reputation, research opportunities/quality, attracting quality students; career opportunities, working environment, remuneration and employment conditions  
Higher education institutions Workable governance framework; funding; regulatory compliance costs  
Reputation; course offerings, and differentiation from competitors  
Infrastructure and facilities; also issues/concerns as for students and staff |
| **Business, industry** | Ensuring that skills and numbers of graduates match industry needs; research, innovation |
| **Melbourne communities** | Benefits to the economic, cultural, sporting and learning fabric of communities e.g. access to cultural, education and sporting facilities; providers of community services; and centres for community knowledge, learning and social innovation.  
Demands on local services; local planning impacts |
| **Government** | State government Policy framework  
Financial interest as asset owners, recipient of payroll tax; export funds  
Regulatory oversight, establishes statutory framework for institutions  
Links/guidance from higher education to state decisions on other stages in education  
Competes with other states and territories for Commonwealth funding, higher education prestige, foreign students  
Federal government Ensuring that nationally, institutions meet Australia’s needs, and higher education objectives (includes economic, research and innovation, social objectives);  
National reputation; institution accreditation  
Funding – and associated accountably for public funds  
International/regional commitments and standing  
Tourism, export |

It is important to understand these perspectives in order to appreciate the drivers and capacity of each stakeholder to influence change. All stakeholders have the mutual obligation to support the recommendations put forward in this paper.

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7 Further information on the contribution of higher education to communities is discussed in the City of Melbourne Melbourne Metropolitan Universities’ Contributions Study, May 2007.
5. TASKFORCE OBSERVATIONS – ISSUES AND OPPORTUNITIES

The following sections provide some background, insights and observations that are relevant to the Taskforce recommendations.

a. Effective partnerships between universities and industry

Effective partnerships can work towards two important outcomes for the higher education sector: research, development, innovation; and appropriate, relevant course content.

Though impediments exist, a recent City of Melbourne study shows that many successful research projects are occurring, and resulting products are being commercialised. The study also noted that the level of industry funding for research in Victorian universities has increased by two thirds between 2000 and 2004 (compared with an increase of 40 percent for all Australian universities in the same period).

However, a key concern identified by the Taskforce is a mismatch between some course content and graduates’ skills/capabilities; and business/industry needs.

Contributing causes include:

- bureaucratic obstacles and time lags between course design, accreditation, implementation; and industry demand
- poor communication between industry, institutions and government
- course numbers and content that are skewed by the current funding model
- core skill and learning deficiencies carried over from earlier stages in education.

One step towards changing these dynamics would be for universities to develop new models to engage major private sector employers. Currently, employers have to deal with decentralised faculties and administrative officers who often do not give private sector employers the sense of partnership or engagement, which they enjoy in most of their customer-supplier relationships.

Also, if there are effective forums in which key figures from higher education institutions and industry can reach consensus views on these important issues, they will provide a far more powerful voice in government reviews and debates than the present more fragmented approach. A unified voice is a powerful tool in promoting effective reforms with all tiers of government.

For our own part, the Committee for Melbourne will assist this process by hosting annual forums for key Melbourne business leaders and Vice-Chancellors and to undertake annual feedback surveys of its members.

The annual forum of key Melbourne business leaders and Vice-Chancellors will discuss national skill shortage trends and emerging challenges and opportunities facing higher education. This forum will assist in identifying the short, medium and long term issues. No such strategic forum for exchange on graduate development exists at present. This dialogue between employers and education providers is crucial to ensuring the continuing relevance and efficacy of higher education in achieving outcomes that will engender future prosperity.

Annual feedback surveys of Committee for Melbourne membership will also be instituted to match demand for skilled graduates and provide ongoing information to universities and government on the areas in which the sector should develop and need to be addressed.

Recommendation 1

Universities, business and governments must improve liaison capacities, which proactively engage education providers and beneficiaries of education in course content and design. Major private sector employers should have a role in developing courses, graduate capabilities and research programmes that are aligned with society, industry and commercial requirements.

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8 City of Melbourne Melbourne Metropolitan Universities’ Contributions Study, May 2007, at section 4.6
b. Recognition between State and Federal Governments

Higher education is a key contributor to Melbourne’s success.

In addition to its role in encouraging innovation and developing Melbourne’s rich artistic and cultural environment, the higher education sector is an economically important industry in its own right. In FY 2004-05, higher education accounted for almost $2 billion in exports (7% of Victoria’s total and equal to earnings from automobile exports); employed 27,000 Victorians; contributed over 4% of Victorian payroll tax receipts; and accounted for 4% of Gross State Product. Without the presence of over 68,000 international students, the Victorian economy would have been approximately $2.3 billion poorer. In addition, our universities’ high-profile, world-leading academics attract numerous scientific and scholarly conventions to Melbourne, which contribute significantly to our billion-dollar-a-year convention industry.

Higher education and independent research institutions account for one-quarter of all R&D spending in Victoria, representing almost $1 billion per annum. Higher education R&D is a prerequisite for the development of industry clusters around centres of excellence, including automotive and aerospace design and manufacturing, life sciences, agricultural production and food additives. Industry clusters are groups of competing, collaborating and interdependent businesses working in a common industry and concentrated in a geographic region. They draw on shared infrastructure and a pool of skilled workers. Successful clusters are outward looking and bring together knowledge, employees, expertise and resources at greater than national average concentrations. The result is specialisation, comparative advantage and critical mass in the cluster region. Clusters generate wealth for their regions and can be considered the building blocks of regional economies.

The Parkville Precinct and Monash University medical research cluster show how clusters facilitate the transition of basic research through the applied research and clinical phases, and finally to commercialised end products. The City of Melbourne study refers to various other successful examples.

The University City Index ranks Melbourne fifth in the world

Worldwide, only a few cities can be regarded as global university cities. Melbourne has a disproportionate number of internationally regarded universities for its size, enjoys acknowledged liveability, and has sustained investment in education and research, with the subsequent uptake of graduates and ideas. This puts it in the company of a very small number of cities across the globe.

To evaluate Melbourne’s position as a global university city, the Taskforce, led by RMIT, developed the world’s first University City Index. The index includes factors such as liveability, global reputation and educational and research inputs. Because the Index covers not only the quality of a city’s education and research institutions, but also its quality of life, affordability, safety and other aspects of the student experience, it does not rank universities but the cities in which they operate.

Evidence of Melbourne’s global competitiveness is clear. Melbourne has the highest proportion of foreign students of any municipal area in the world. Four Melbourne universities are among the London Times’ Top 200 Higher Educational Institutions (with the University of Melbourne the only Australian university in the top 20), and the University of Melbourne was one of two Australian universities to appear in the top 100 of Shanghai Jiao Tong University’s Academic Rankings of World Universities. Melbourne-based universities have responded rapidly to changing global demand for quality education, most recently by opening campuses in South Africa, Malaysia, and Vietnam, with other international campuses planned. They are also a vital element of the city’s global connectivity—connecting Melbourne with the world through international students, staff, campuses, joint-degree programs with overseas universities (like Swinburne and North-eastern University in Boston) and membership of international networks (such as Universitas21).
c. Funding and Governance

In its August 2002 paper Meeting the Challenges: The Governance and Management of Australian Universities, the Commonwealth Department of Education Science & Training summarised the legal and accountability frameworks for this sector (see Appendix 5).

Higher education in Victoria is delivered by nine public universities, and approximately fifty private providers. Private providers are also accredited to deliver higher education courses in Victoria to offer equivalent courses.

The State Government owns university infrastructure, and is responsible for the statutory framework for university establishment, operation and governance. The Higher Education and Regulation Division is responsible for planning, coordinating and monitoring the delivery of higher education within Victoria. The Victorian Minister responsible for the higher education sector is Jacinta Allan, MP, Minister for Skills, Education Services & Employment. The Office of Training and Tertiary Education provides strategic leadership and support for the development of the higher education and vocational education and training systems; plans, purchases and monitors the services offered by TAFE Institutions and registered training organisations; and manages legislative, regulatory and governance responsibilities relating to vocational education and training and higher education.

However, as noted above, the primary responsibility for university funding lies with the Commonwealth Department of Education Science and Training. Through the conditions and monitoring requirements attached to that funding, the Commonwealth shapes the priorities and directions for the higher education Australian students are required to contribute towards the costs of their university education, either through an upfront payment or through a loan under the Commonwealth Higher Education Contribution Scheme (HECS).

It is reasonable to conclude that a governance framework designed from first principles would be very different from the model described above. There is enormous potential for inefficiencies, duplications, misaligned incentives, and unacceptable outcomes to be avoided.

Many reviews have been undertaken of this sector in Australia, committees have been established and re-established, and countless reports have been produced. And yet fundamental problems persist. “Sweeteners”, such as the recently announced federal Government Endowment Fund of $5 billion, are unlikely to address the inherently flawed policy framework. This funding needs to be subject to an independent spending committee and distributed according to merit and national interest to be effective.

Australian institutions face some additional challenges due to the complex federal – state mix of roles and accountabilities, and the resulting tendency of each layer of government to defend its own role and initiatives, and to attribute blame for flaws on its federal/ state counterpart. Institutions, students and the business community are left grappling within an inefficient model.  

An ongoing debate between Federal Government and universities over the need for funding has highlighted the complexity of the current funding system. Although the Commonwealth Government has identified annual surpluses in many Tertiary budgets, these “surpluses” are government driven desirable targets, and are the only means of transferring revenue for asset replacement purposes. Other issues related to governance need to be addressed at a State level. A review of State Government legislation as it pertains to asset ownership should be undertaken to identify the mechanisms that restrict the further growth of universities. For example, RMIT has faced barriers to developing much-needed infrastructure on lands owned by State Government.

If there is a funding crisis looming in this sector, effective solutions are unlikely to emerge through existing processes, governance and funding arrangements. The Taskforce urges the State Government to consider taking steps that are within its power, even radical ones, to help ensure that the sector can continue to meet its objectives.

For example, attracting Victorian and foreign-born academic experts to conduct research and teach in Victoria is the primary focus of organisations like VESKI (Victorian Endowment for Science, Knowledge and Innovation). VESKI is an important policy initiative—its funding (currently around $500k annually) should be expanded and it should be given more control over that funding. By contrast, Queensland has invested $12m and Ireland and Canada invest around $200m and $325m per annum respectively to support research professorships, encourage campus-industry partnerships and attract international academic staff.

The State Government could also explore more far reaching initiatives, such as reduction/abolition of state payroll tax for universities.

**Recommendation 6**

The way that universities are funded is inefficient and undermines the sector’s ability to meet its objectives. The sector requires a fundamental review of the policy framework, working from first principles to build a new funding model that deliver moneys based on merit and national interest, within a co-operative Federal system. In the short term, innovative State-based solutions (such as a review of payroll tax for universities) should be employed to counter the overall decline in Federal Government funding. The State Government is primarily responsible, with universities, for university governance arrangements, but it should also be required to make real financial investment for their well-being.

**Recommendation 7**

Best practice must be instated in the governance of universities and the size, qualifications and relevance of university boards and advisory councils should be reassessed to improve their effectiveness and connectivity to commerce and government.

**Recommendation 8**

Melbourne must continue to attract leading, internationally recognised academics to teach and conduct research at its universities. To that end, funding for the Victorian Endowment for Science, Knowledge and Innovation (VESKI) should be significantly increased and the organisation should be given more control over that funding.

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12 Reporting requirements currently require Ministerial approval of a change in course structure one year in advance, at great cost to tertiary institutions.

13 The Department of Education Science and Training has a financial indicator that requires a desirable profit target for universities of from 3%-5%.
6. NEXT STEPS

Taking the recommendations forward

The Committee for Melbourne will work with its networks and membership to play a facilitation role among the key participants to focus attention on progressing the recommendations identified in this paper. The Committee will seek to engage with the Victorian State Government in the period August to December 2007.

7. APPENDICES

1. Role of The Committee for Melbourne
2. Taskforce Members
3. Methodology
4. Higher Education Statistics
5. Legal and Accountability Frameworks

Appendix 1
Role of The Committee for Melbourne

The Committee for Melbourne is a private, not-for-profit network of 170 diverse organisations from Melbourne’s business sector, as well as from science, academia, community and Government. The Committee champions ideas that go to three key strategic objectives (as shown below), with the overarching goal of making Melbourne increasingly successful.

On the basis that the high-level issues faced by any city will only be resolved by bringing all stakeholders together to work constructively, the Committee formed a Higher Education Taskforce to explore innovative solutions to the complex and challenging issues facing the sector, the health of which is vital to Melbourne’s future success.

The recommendations in this paper represent a true consensus viewpoint, agreed by universities, industry, community groups and Government.

Committee for Melbourne Strategic Objectives and Relationship with Higher Education

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<tr>
<th>Committee for Melbourne Strategic Objective</th>
<th>Relationship with Higher Education</th>
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<tr>
<td>To encourage a competitive and innovative business culture</td>
<td>“Tertiary skills are critical to the success of Melbourne’s economy and innovation”</td>
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<tr>
<td>To ensure global relevance</td>
<td>“Tertiary sector is Melbourne’s fastest growing export opportunity”</td>
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<tr>
<td>To enhance liveability</td>
<td>“Universities are critical to a creative vibrant Melbourne”</td>
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Appendix 2
List of Taskforce Participants

Co-Chairmen
Mr Michael Andrew, Australian Chairman, KPMG
Mr David Miles AM, Deputy Chairman, Committee for Melbourne
Recognising the urgency and scale of the problem, the Committee for Melbourne launched the Higher Education Taskforce in May 2006. The Taskforce brings together leaders from business, academia, Government and civil society. Its primary objectives are to identify the key components of the threats and opportunities facing our higher education sector and to develop a series of consensus-based, concrete and realistic responses to be implemented by business, Government and academia by December 2008.

The role of the Taskforce is to identify and evaluate inputs to, and outputs from, Melbourne’s universities, as well as their direct economic, social and cultural impacts on the city. In examining four key areas—undergraduate, post-graduate, R&D and foreign students—the Taskforce was interested in a set of broad themes and issues around Melbourne as a world university city, rather than in the strengths or weaknesses of individual institutions.

While the Taskforce recognises the scale of the issue, the significant body of work already undertaken, and its own limitations in terms of resources, it is confident that the Committee for Melbourne can contribute creative and valuable responses to some of the most important higher education challenges and opportunities that will face Melbourne over the next 30 years.

In formulating its recommendations, the Taskforce relied on multiple sources of information:

- A facilitated Taskforce dialogue involving Committee for Melbourne members representing academia, business, Government and civil society, resulting in a SWOT analysis of the higher education sector;
- A survey of major private and public sector graduate employers;
- Several studies of the graduate employment and international student market, and trends in the availability of university places;
- Interviews with university administrators and Government departments to gain a good understanding of the current state of the sector’s finances and governance structures; and
- Public information drawn from the Australian Bureau of Statistics, Commonwealth and State Education Departments, and the Australian Vice Chancellors’ Committee.

### Appendix 4

**Higher Education Statistics**

**Number of students**¹⁴ (Victoria total, end 2005): 242,951 (28% of Australia Total)

- Undergraduate – 167,987 (69%)
- Postgraduate – 71,650 (30%)
- Other – 3,314 (1%)
- Domestic – 174,519 (72%)
- Interstate – 13,246 (6%)
- Overseas – 68,432 (28%)

¹⁴ DEST Australian Higher Education Statistics 2005
Economic

- Contribution to Gross State Product – Direct 2%; Indirect 4%.  
- Direct employment (Victoria)\(^\text{16}\) – 27,000 FTEs  
- Direct spend - $4.9bn (2004)\(^\text{17}\)  
- Exports: almost $2bn annually (direct) in Victoria (around 7% total exports)\(^\text{18}\)  
  - International student expenditure\(^\text{19}\) (68,432 students, excluding dependents) ~ $1.5bn annually  
  - International student expenditure\(^\text{20}\) (including dependents) ~ $2.3bn annually  
  - Overseas university operations – 76,575 students for all Australian Universities\(^\text{21}\)  

- Publications – The level of academic publication increased substantially in all Victorian universities from 6,657 “weighted” publications in 2000 to 10,447 in 2004.  
- Students and Faculty in Victorian universities created:  
  - Almost 6,000 articles for publication in peer-reviewed journals  
  - Almost 3,000 refereed papers for presentation at conferences  
  - Almost 200 books and over 1,000 book chapters\(^\text{22}\)  
- R&D Expenditure (2003): $3.5bn  
  - Private Sector $1.9bn (54%)  
  - Higher Education $840m (24%)  
  - Government $525m (15%)  
  - Private Non-Profit $245m (7%)\(^\text{23}\)  

- Clusters - Industry clusters are groups of competing, collaborating and interdependent businesses working in a common industry and concentrated in a geographic region. They draw on shared infrastructure and a pool of skilled workers. Successful clusters are outward looking and have a concentration (e.g. employment) within a region which is greater than the national average - implying specialisation, comparative advantage and critical mass within the region. They bring wealth into the region and can be considered the building blocks of the economy.  
- Invest Victoria has identified the following as key industry sectors for Victoria, a number of which have now developed into physical clusters:  
  - Automotive (Design and Manufacturing)  
    - Size: AUD 10bn/year  
    - Exports: AUD 2.8bn/year  
    - Labour Force: 51% of national total  
  - Aerospace (Design and Manufacturing)  
    - Size: AUD 600m/year (150 companies)  
    - Exports: AUD 250m/year  
    - Labour Force: 5,000 FTEs (working with 9 universities state-wide)  
  - Financial Services/Funds Management:  
    - Size: 800 Fin. Svcs operations, 450 Super funds  
    - Funds under Management in Victoria: AUD 90bn  
    - Labour Force: 100,000 FTEs  
  - Food production and additive manufacturing  
    - Size: USD 8.1bn value-add to Victorian economy  
  - ICT  
    - Size: USD 17.3bn  
    - Exports: AUD 7.9bn/year  
    - Labour Force: 76,500 FTEs  
  - Life Sciences (Biotech and Pharmaceuticals)  
    - Market Cap (listed companies): AUD 416bn  
    - R&D Spend: AUD 413m (2005)  
    - Labour Force: 6,100  
  - Telecoms  
    - Revenue: AUD 40m/year  
    - Labour Force: 20,000\(^\text{24}\)  

\(^{15}\) Tourism Victoria 2004  
\(^{16}\) Commonwealth Labour Market Information Portal 2006  
\(^{17}\) Tourism Victoria 2004  
\(^{18}\) ABS 2005, DFAT 2005, Department of Primary Industries, Department of Manufacturing and Export, Committee for Melbourne Analysis  
\(^{19}\) ABS 2006, Committee for Melbourne Analysis  
\(^{20}\) ABS 2006, Australian Education International: Survey of International Student Spending in Australia, Committee for Melbourne Analysis  
\(^{21}\) DEST Australian Higher Education Statistics 2005  
\(^{22}\) AVCC HERDC TimesSeries Data, 1992-2004  
\(^{23}\) ABS Business Expenditure on R&D  
\(^{24}\) InvestVictoria Key Victorian Industry Sectors
Appendix 5
Legal and Accountability Frameworks

From Meeting the Challenges: The Governance and Management of Australian Universities, the Commonwealth Department of Education Science & Training summarised the legal and accountability frameworks for this sector, section 2:

17 The legislative and accountability frameworks for Australian universities are unusual because State/Territory governments generally have responsibility for the enabling legislation for each university but the Commonwealth has responsibility for the public funding of those institutions. The Australian Constitution vests responsibility for education with the States/Territories. However, in 1974 the Commonwealth sought and received State/Territory government agreement to transfer public funding responsibility for higher education to the Commonwealth. Today State and Territory governments contribute just 1.5 per cent of universities’ total operating revenue.

18 In November 1991, the States/Territories agreed to the Commonwealth providing funds directly to higher education institutions, rather than through the States/Territories. This change recognised that the Australian higher education system was national in character, with accompanying national priorities and objectives. It improved accountability by making higher education institutions, rather than the States, directly accountable to the Commonwealth for the expenditure of public funds. Direct Commonwealth funding of institutions began in 1993 (DEET, 1992 and DEET, 1993(a)).

19 States/Territories retained legislative responsibility for the establishment and oversight of institutions and for ensuring that they met the reporting obligations, financial management and accounting standards for public authorities. However, during the second half of the 1990s there was increasing recognition of the need for common accreditation and quality management processes across all States and Territories. This culminated in the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) endorsing the National Protocols for Higher Education Approval Processes on 31 March 2000 and agreeing to the establishment of the Australian Universities Quality Agency (AUQA).

20 The National Protocols were designed to ensure consistent criteria and standards across Australia in such matters as the recognition of new universities, the operation of overseas higher education institutions in Australia, and the accreditation of higher education courses to be offered by non-self accrediting providers. They were seen as important to protecting the standing and competitiveness of Australian universities nationally and internationally (DETYA, 2000(b)).

a. State and Territory regulation of public universities

21 Each public university has its own enabling legislation that establishes it as a statutory body in its home State/Territory. In most cases this legislation specifies the university’s objectives. These objectives are the essential statement of what the university has been set up to achieve. Examples of the sorts of objectives which universities have are in Appendix 1. Some universities do not have objectives but have a list of functions. At least two universities have no stated objectives or functions. In these cases the university can engage in those activities generally understood as being university related.

22 As statutory bodies, public universities are subject to a wide range of State and Territory legislation in addition to their enabling legislation. All States and Territories have financial administration and audit Acts which apply to their statutory bodies, including universities. These Acts, and the various regulations and Ministerial guidelines under them, provide the framework for universities’ financial management and accountability.

23 The financial accountability frameworks of the States/Territories are, in general terms, those applied to any State/Territory statutory agency and are not university specific. They require universities to provide Ministers with audited financial statements and performance information and to notify Ministers about specified financial and business dealings. The framework differs between States/Territories and may differ between universities in the same State/Territory. Some differences are matters of history rather than design.

24 Universities also report to State and Territory governments and Parliaments on broader strategic aspects of their operations by, for instance, submitting Annual Reports for tabling in Parliament and providing strategic plans for government scrutiny.

25 Some submissions to this Review comment on the more commercial environment in which universities are now operating. This raises challenging issues about what sort of legal entity universities should be, and the appropriate regulatory and accountability framework for universities.