Report advising on the development of the Victorian Tertiary Education Plan

DECEMBER 2009

EXPERT PANEL
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Report advising on the development of the Victorian Tertiary Education Plan
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### ABBREVIATIONS AND ACRONYMS

- Panel members’ biographical details and Secretariat details
- Ministerial Roundtable meetings
- The growth of higher education in Australia
- Victoria’s universities
- Maps showing the location of Victoria’s tertiary education institutions
- Victoria’s diverse regions
- The distribution of 2008 ENTERs, showing Victorian regions by postcode
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REPORT ADVISING ON THE DEVELOPMENT OF THE VICTORIAN TERTIARY EDUCATION PLAN

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Dear Minister

The Panel you established on 2 April 2009 is pleased to present you with its Report advising on the growth of Victorian tertiary education to 2025.

The Panel finds sufficient evidence to judge that the major national growth target (40 per cent of 25 to 34 year olds attaining bachelor degrees by 2025) will be achieved in Victoria. Indeed, we have concluded, on the basis of evidence presented to us, that Victoria will need a higher attainment, around 47 per cent, both to meet industry and workforce needs in this State and to contribute effectively to the attainment of the Australia-wide target.

The Australian Government’s equity target of 20 per cent undergraduate participation from the low SES quartile will prove very challenging. We suggest a number of actions to improve low SES participation and suggest Victoria should measure its achievement against the Victorian population, not the Australian population, as Victoria has less than 25 per cent of its population in the Australia-wide low SES quartile.

Both Australian Government targets will require greater participation from outer Melbourne and regional Victorian communities if they are to be achieved. Again, we have proposals and suggestions, the most important of which will require greater collaboration and linkages between our universities and our TAFE institutions. We see the establishment of a Partnerships Facilitation Fund as key to highlighting this central issue. We recommend further that each administrative region across regional Victoria seeks to improve the rate of bachelor degree attainment and low SES participation in measurable ways from current levels.

Finally, we see a future where the Victorian Government seeks more actively to facilitate, support and encourage its higher education institutions which will become even more central to meeting industry needs, and to represent this sector as an important export industry in its own right. As tertiary education becomes a ‘universal entitlement’, the State will need to more comprehensively monitor and analyse the effectiveness of its whole tertiary system, not just its VET sector.

Bronte Adams, Jenny Dawson, David Phillips and I have found the task undertaken to be stimulating and challenging. We enjoyed participating in the Roundtables you led across different parts of the State, and the various interactions with the wider community that our work entailed.

The Panel expresses its appreciation of the work of its dedicated Secretariat (listed in Appendix 1) and of the support of the leadership of Skills Victoria.

Yours sincerely

Kwong Lee Dow Chair, Tertiary Education Expert Panel
The Expert Panel was commissioned by the Victorian Government to advise on the development of a Tertiary Education Plan for Victoria.

The context of this Plan is the Australian Government’s responses to the Report of the Review of Australian Higher Education, 2008 (referred to here as the Bradley Review). The key elements of the Australian Government’s policy statement, Transforming Australia’s Higher Education System, responding to the Bradley Review are outlined in the body of this Report.

The Panel’s major focus has been

> the introduction of a student demand-based funding allocation system (so-called ‘universal entitlement’) by 2012
> the introduction of a target of 40 per cent of 25-34 year olds attaining a qualification at bachelor level or above by 2025
> widening access to higher education to previously under-represented groups.

The Panel considered these policy initiatives in the context of Victoria’s actual needs – that is, whether or not the measures proposed are sufficient and meet Victoria’s needs. The Panel also focused on what the Victorian Government will need to do to support and complement what are widely considered desirable and long overdue policy reforms in higher education in Australia.

The Panel believes that it is fundamentally important that all Victorians are given the chance, and are encouraged, to maximise their opportunities in life and their ultimate contribution to society and the economy. To this end, the Panel recommends that ambitious goals be set for participation in higher education in Victoria.

The Panel has considered higher education firmly within the broader context of tertiary education and this Report, therefore, advises on the development of the Tertiary Education Plan for Victoria.

Victoria is relatively well positioned to achieve something close to ‘universal participation’ by around 2025. Currently, 88.7 per cent of young Victorians complete year 12 or its equivalent and by 2015 it is anticipated this will grow to 92.6 per cent. A significant majority, possibly 80 per cent, of these school completers take up some form of tertiary education whether university or VET (diploma and advanced diploma level) on a full, or part-time, basis.

The Panel seeks to support and propose initiatives to bring more young people into tertiary education, to ensure a satisfying learning experience and to find ways to help more of them to complete their courses successfully and in a reasonable timeframe. To bring more young people into tertiary education requires adequate preparation, genuine choice, and pathways that lead to further opportunities, including appropriate employment.
The Panel is aware that the goals of maximising social equity and economic efficiency will not be fully met by an almost exclusive focus on the needs of young people, neither will they be met by focusing simply on higher education. A significant challenge for the Victorian Government will be to create structures that also cater for the needs of mature-aged students and students who have not had a conventional pathway to tertiary education and training.

Through their respective reform initiatives, both the Victorian Government and the Australian Government have created the opportunity for any Victorian without a post-school qualification to gain access to a government-subsidised training or higher education place, underpinned by the availability of income contingent loans for students. However, the skills reforms introduced by the Victorian Government are at an early stage and the Australian Government’s proposed higher education reforms won’t begin until 2012. Both levels of government should be aware of the need for dynamic planning processes that respond to changing needs and conditions.

Both the Victorian Minister for Skills and Workplace Participation and the Australian Minister for Education, Employment and Workplace Relations have spoken of the need for ‘inter-connectedness’ between the higher education and the VET sectors. All the indications are that Victorian public tertiary institutions are showing a willingness to expand and collaborate and are moving quickly to adapt to the needs of the future. Achieving the goals set for 2025 will require a significant increase in commencements, particularly in the next two years. Nevertheless, there are areas of ‘disconnectedness’ that still need to be fully addressed, particularly in relation to articulation and credit transfer between the sectors. This Report contains the Panel’s findings and recommendations, which are supported by analysis and commentary.

The role of the State Government

International economic evidence supports the importance of innovation, skills and knowledge as key elements of the ‘knowledge economy’. According to the OECD, State Government policies can influence the operation of the knowledge economy within, and across, its borders. Similarly, the Victorian Government is best positioned to take an integrated view of the whole human capital development process, including pre-school, school, post-school education and training and the transition to employment, and to adopt whole-of-government policy approaches.

Victoria’s economic future is changing towards a knowledge economy, based on high-technology and high value-added goods and services, in industries such as advanced manufacturing, biotech and nanotechnologies, emerging ‘green’ industries, ICT, professional and technical services, education, design and tourism. A more highly-skilled workforce is required to achieve this future. Victoria’s universities perform a fundamental role: they provide the education and training required to develop the knowledge, skills and opportunities graduates need to enter the workforce and they deliver appropriately prepared workers to industries competing in the global economy.

While the Australian Government has major funding responsibility for higher education, Victoria’s overall contribution is around $350 million per annum. Beyond this substantial material contribution, the Victorian Government’s key role is to facilitate and support reciprocal relationships between universities, TAFEs, industry, the community sector and government departments and agencies. This includes facilitating cross-sectoral and cultural collaboration in a range of areas such as career development opportunities (including work placements), knowledge exchange and mentoring relationships.

The Panel believes that it is vital that the Victorian Government further develop a strong integrated capability to analyse and contribute to policy debate across the various dimensions that affect the operation of the tertiary education sector and its contribution to Victoria.
The Panel also believes that there is a strong case for the Victorian Government to facilitate the alignment of institutional activity at the ‘sub-national’ level to reflect regional and state needs and priorities through direct involvement in Australian Government-initiated compact discussions with Victorian universities, particularly Victoria’s four multi-sector universities. Joint conduct of compact discussions with these multi-sector universities would be a useful step towards more integrated planning and reporting, reducing duplication and complexity and recognising the complementary nature of higher education and VET provision in these institutions.

**Victoria’s role in quality assurance and regulation**

The Panel is aware of the intensive consideration by governments and within the sector around issues concerning the establishment of a Tertiary Education Quality and Standards Agency as the new national quality regulator. The Panel understands that it is important that the Victorian Government’s shared interest and responsibility in the tertiary education sector be reflected in any new national regulatory arrangements.

**Imperatives of growth**

The Australian Government has set a national target of 40 per cent of 25-34 year olds obtaining a qualification at bachelor level or above by 2025. However, the Panel concluded that Victoria’s economic and social needs will require an attainment level in this age group of around 47 per cent.

Modelling undertaken for the Panel indicates that to reach this level of attainment the cohort of Victorian graduates must increase by 173,000 by 2025. Allowing for the contribution of net migration, the Panel estimates that this means Victoria will require at least an additional 10,000 commencements each year. The Panel concluded that, while student demand for higher education will be sufficient to meet Victoria’s needs, efforts to achieve the necessary level of commencements must be rapid and sustained.

**Capacity**

The Panel notes that Victoria’s public tertiary education and training system is well positioned to meet the requirements of growth. Many universities and TAFE institutions are presently signalling a willingness to expand. Some are already growing and their plans and proposals appear to the Panel to be realistic and achievable. There is also a number of well-established private providers. But, in order to accommodate the requisite 10,000 graduates a year, which would mean an additional 40,000 students in the system at any one time, more effective use of existing assets and infrastructure in the whole of the tertiary sector will be required.

The Panel sees no short-term need for any new universities, but expects that new institutional structures may emerge over time. These may be completely new, independent institutions or they may arise out of collaborations between public and private providers and/or with industry.

The Panel suggests that with both an ageing workforce and an expanding system, Victoria co-ordinate a project with public tertiary education institutions to assess state-wide current and planned capacity against anticipated student numbers, and to identify shortfalls in infrastructure and infrastructure sharing arrangements and in relation to academic, professional and support staff requirements.

The Victorian Government should also consider integrated planning exercises in priority areas – at institutional, regional and/or discipline level – identifying supply and demand requirements and supporting the principle of optimising asset utilisation.
Current levels of higher education completions will not meet Victoria’s future economic needs. A study commissioned by the Victorian Government in 2007 estimated a shortfall of 96,000 bachelor degree completions and 10,000 postgraduate degree completions over the fifteen year period from 2005. This translates to raising annual commencement levels by 9,000 and 1,200 respectively over this time.

In late November 2009, the proportion of 25 to 34 year olds with bachelor degrees across Australia had increased markedly, from 29.4 per cent in 2006, to 31.9 per cent in 2008, and to 34.6 per cent in 2009. This rise was mainly driven by migration: Australia’s population growth topped 2 per cent, with close to two-thirds of that growth fuelled by a record migrant intake of nearly 300,000. This sort of statistical spike demonstrates that making accurate predictions about future needs is fraught with difficulty. However, it can be said with absolute certainty that the demand for skills, particularly higher-level skills, will continue to grow.

The Panel considers that, while migration will always make a useful contribution to enhancing the skills base of the economy, it would be unwise to make our economy overly reliant on migration to meet critical skills needs. Australian governments must provide, first and foremost, for the needs of current residents, recognising that any goals need to be considered in terms of economic and social imperatives, including social inclusion, cohesion, tolerance and civil values.

A diverse, high quality system that meets industry needs

The projected growth in higher education must align with actual industry and economic need. The Panel concluded that in the higher education sector current workforce development processes are relatively weak in comparison with the VET sector. Industry sector networks between employers and tertiary providers need to be strengthened and the Panel sees this as an important role for the Victorian Government.

The Panel acknowledges that, in an expanding system, it is important to pay particular attention to the maintenance of quality provision. Students need to be assured that they will hold a robust and credible qualification at the end of their studies. Similarly, employers need to be assured that the graduates they employ have the knowledge, understanding and skills traditionally associated with a bachelor degree. However, it is important to get the balance right: the quality regime must not act as a barrier to diversity and innovation, nor should it inhibit the emergence of new quality-assured institutional structures or a wider range of providers.

Once the Australian Government’s proposed Tertiary Education Quality and Standards Agency is established and consolidated, it may result in Commonwealth-supported places being extended to accredited, quality-assured private providers, which would result in increased capacity and enhanced diversity.

Equity

Victoria’s education and training system is high-performing by Australian and world standards. However, there are groups within the population who are markedly under-represented in tertiary education. These groups include: non-metropolitan residents; residents of the outer urban fringes of Melbourne; Indigenous Victorians; and, people from a low SES background. Naturally some of these groups overlap.

In order to improve equity and widen participation in higher education, the Australian Government has set a target to grow the proportion of undergraduate students enrolled in higher education from financially less advantaged backgrounds (the low SES quartile) from the present level of around 15 per cent to 20 per cent by 2020.

The Panel considers this to be a particularly challenging target for Victoria.
Over the past 20 years, participation in higher education in Victoria has grown from around 80,000 full time equivalent domestic students to more than 120,000. While this growth has been in all segments of the population across Victoria, relative proportions of participation by people from a low SES background have remained virtually unchanged.

A Universities Australia data analysis of participation and equity groups demonstrates that students from high SES backgrounds are three times more likely to go to university than students from low SES backgrounds. The current share of university places for low SES students in higher education is approximately 15 per cent, compared to a population share of 25 per cent. This relative rate of participation has remained unchanged for more than 20 years.

Because Victoria has a lower proportion of people from a low SES background (19.8 per cent compared to 25 per cent nationally), apparent higher education participation by this group is somewhat lower in Victoria.

The Panel is aware that this may be due, in part or whole, to the methodology employed for calculating socioeconomic status, which the Australian Government is currently reviewing. Accordingly, the Panel recommends that, while the Victorian Government endorses the challenging ambition of raising the proportion to 20 per cent by 2020, this should be in proportion to the percentage of low SES people in the Victorian population.

Regional and outer urban provision

There is an appreciable gap in participation and attainment levels between large parts of inner and middle metropolitan Melbourne, outer urban Melbourne and regional Victoria. In terms of access to higher education, some students in regional and outer urban locations are constrained in their choices by: low educational attainment; limited family and personal financial resources; limited choice of course available locally; limited personal and family aspiration; reluctance to take on the financial burden involved; limited subject choice in many small regional schools; and limited understanding of the benefits of higher education.

Boosting participation by members of currently under-represented groups requires a multi-pronged strategy that takes into consideration the funding of higher education, as well as aspirational, cultural and social factors, which will be particularly challenging to address.

The Panel recommends that by 2025 each non-metropolitan administrative region should achieve at least a 10 percentage point increase in the proportion of people in the 25 to 34 age group who attain a bachelor degree qualification; and by 2020 each non-metropolitan region should achieve at least a five percentage point increase in the proportion of higher education undergraduate enrolments of people from a low SES background.

Access, cross sectoral developments and pathways

While Victoria is already well-positioned with a number of multi-sector institutions and a range of emerging university/school collaborations, the need to grow tertiary education participation to align with Victoria’s economic, cultural and social needs requires that access to study in tertiary education institutions is improved. This can be achieved through better defined pathways, institutional connectedness, and robust alternative selection mechanisms. Improvements to access will only occur through better cross-sectoral linkages and collaborations.
The Panel considers that adequate preparation of students is the key to increasing participation and attainment in tertiary education and that publicly-funded foundation programs, run by universities, TAFE/VET and schools, are an important way to adequately prepare potential students. Issues relating to access that require attention include:

- Articulation arrangements between TAFEs and universities that are neither consistent nor transparent – attention should be given to reducing barriers for students and aiming for student-centredness and institutional efficiencies.
- The Credit Matrix which, while potentially powerful, needs to be properly consolidated and communicated.
- Some VET providers, particularly regional providers, that currently lack the capacity to deliver higher education.
- Regional higher education and TAFE providers that suffer diseconomies of scale.
- Different reporting, funding, quality assurance, industrial and curriculum frameworks that constrain the development of higher education intake and create a structural divide between sectors.

The Panel firmly believes that there is considerable potential for universities and TAFEs to work collaboratively in partnership on a range of issues relating to articulation, preparation of students and the TAFE delivery of higher education in regional areas. The Panel recommends establishing a competitive Partnerships Facilitation Fund to facilitate partnerships between TAFE and higher education institutions, where complete or partial degree level qualifications can be delivered using existing Victorian infrastructure and resources.

TAFE institutions would be provided with the opportunity to apply for funds on behalf of a consortium of partners from a central contestable funding pool governed by Skills Victoria and Regional Development Victoria. This should enable improved access for regional students (and for other Victorian students) by enhancing pathways and providing a variety of study modes as well as increasing the efficient used of existing infrastructure. The benefits to students, TAFEs, universities, and regional development are discussed in the Report.

Access to higher education is currently limited by the number of Commonwealth-supported places the Australian Government is prepared to fund, which has resulted in a wide gap between the demand for, and the supply of, higher education. The demand for publicly subsidised higher education places has exceeded supply.

The principal rationing mechanism for school completers has been the ENTER. In an uncapped, demand-driven system, the ENTER is of less relevance. The Panel’s Progress Report (August 2009) noted that the current university admissions process is failing to meet the many and varied needs of all of its stakeholders.

While an ENTER is a good indicator of current academic preparedness for higher education, it is not considered to be a strong indicator of capability. In the context of the targets adopted by the Australian Government and the creation of a demand driven system from 2012, the claims of applicants with relatively low ENTERs and prospective mature-aged students with no ENTER will need to be properly assessed and considered.

In the Panel’s opinion, it is important to develop a broader range of criteria for university admission in order to generate greater participation in the tertiary sector and to prevent negative perceptions developing about the quality of new entrants and the institutions and programs in which they enrol.
RECOMMENDATIONS

1. The Panel concludes that Victoria will need a rate of bachelor degree attainment in the order of 47 per cent of 25 to 34 year olds with a bachelor degree by 2025 and therefore recommends that the Victorian Government advocate to the Australian Government for the resourcing requirements to meet this need. (Chapter 3.3)

2. That the Victorian Government assesses the state-wide current and planned capacity of tertiary education institutions against anticipated student numbers and identify shortfalls in:
   > infrastructure and infrastructure sharing arrangements
   > professional staff
   > support staff

   The Victorian Government should coordinate responses through coordinated funding submissions to the Australian Government. [Chapter 4.1]

3. That the Victorian Government works with institutions to assist them in planning for forthcoming major capital and IT requirements and developments. [Chapter 4.1]

4. That the Victorian Government commences integrated planning exercises in priority areas based on the pilot done with Victoria University, identifying supply and demand requirements by region and supporting the principle of avoiding subscale campuses. Integrated planning should involve tertiary institutions, local industry/employers, ICT representatives, transport and student housing issues. (Chapter 4.1)

5. That the Victorian Government discusses with institutions the most effective way, if any, that the Government can assist in ensuring that academic workforce requirements due to growth in the sector can be adequately met in the future. (Chapter 4.1)

6. That some appropriately qualified staff may be identified in schools, TAFE institutes and universities, who could effectively teach students needing special attention and assistance at first or second year undergraduate level. Over time employment arrangements for limited numbers of such ‘expert teachers’ could allow them to build careers through work in more than one sector. As well, a pilot program could be initiated with an education faculty to prepare a stream of teaching staff with proficiencies to teach from say, year 11 and 12 through to first and second year undergraduate level. [Chapter 4.1]

7. That, in order to achieve more widespread blended education models, the Victorian Government should work with institutions to identify examples of innovative teaching methodologies that may increase the diversity of learning experiences. Relevant information, including successful e-learning delivery methods, should be disseminated to all tertiary institutions. (Chapter 4.1)
8. That the Victorian Government reconceptualises and strengthens its role in higher education in Victoria to underpin the State’s transition to a knowledge-based economy and as a key element of a broad human capital development strategy. (Chapter 4.2)

9. That the Victorian Government strengthens its capabilities to analyse, facilitate, influence and support developments in the public interest that emerge from the tertiary education sector. (Chapter 4.2)

10. That the Victorian Government establishes processes across all its relevant planning activities that embed higher education participation in community, economic, social and cultural policies. In particular, higher education involvement should support a comprehensive approach to human capital development and the development of a knowledge economy. (Chapter 4.2)

11. That the Victorian Government coordinates through integrated planning those State responsibilities that intersect with the higher education sector including schools, VET, transport, and infrastructure planning. (Chapter 4.2)

12. That the Victorian Government develops a strong and integrated capability to analyse and contribute to policy debate across the various dimensions that affect the operation of the higher education sector and its contributions to Victoria. (Chapter 4.2)

13. That, having developed a Plan for Tertiary Education, the Victorian Government should continuously monitor it through formal reporting mechanisms. Particular areas of focus should include: attainment, enrolments, low SES and regional participation rates and international student numbers. It is essential that the Plan is dynamic and able to accommodate the needs of a changing tertiary education landscape. (Chapter 4.2)

14. That the Victorian and Australian Governments need to create a more consistent policy framework across the tertiary sector. Such a framework should address:
   > funding
   > quality assurance and regulatory arrangements
   > student financing
   > industrial issues

   The framework should be evaluated against its capacity to encourage student progress through levels of the Australian Qualifications Framework (AQF). (Chapter 5)

15. That the Victorian Government seeks to ensure that new quality arrangements (TEQSA) do not constrain the diversity of providers and the emergence of new collaborations. (Chapter 5.4)

16. That the Victorian Government supports the further development of an open higher education market including the flow of Commonwealth funding to non-Table A providers as envisaged by the Bradley Review. (Chapter 5.4)

17. That the Victorian Government advocates that the Australian Government commits to funding levels that will at least sustain current quality levels and, as a minimum, accepts the proposal to supplement indexation recommended by Bradley. (Chapter 5.5)

18. That the Victorian Government advocates that the Australian Government undertakes modelling to assess more accurately funding requirements for the numbers of students the system will need to accommodate over the next fifteen years, based on the modelling on student numbers completed for the Panel. (Chapter 5.5)
19. That the Victorian Government should work with higher education institutions to ensure the needs of the State are considered in compact discussions with the Australian Government and in the development of the profiles of higher education institutions and to ensure that, where appropriate, coordinated and consolidated bids are made. [Chapter 5.6]

20. That the Victorian Government works with Skills Australia and Industry Skills Councils to ensure that Victorian industry and tertiary education institutions have effective input into the development of a national network of workforce development advice for the tertiary sector. [Chapter 5.7]

21. That the Victorian Government further develops its own workforce needs, integrated planning and policy capacities in order to:
   > inform its own planning decisions in relation to tertiary education and industry development
   > provide direct advice to the Australian Government when necessary on priority skills needs for the Victorian labour force
   > enhance the provision of industry and occupational level labour market information for students, prospective students and education providers. [Chapter 5.7]

22. That the Victorian Government facilitates the development and operation of industry sector networks between employers and tertiary education providers. The networks should provide labour market intelligence and specific proposals for action on skills shortages. [Chapter 5.7]

23. That the Victorian Government identifies key gaps and skills deficits in the next ten or fifteen years. [Chapter 5.7]

24. That the Victorian Government considers the introduction of a scheme of public sector internships. [Chapter 5.8]

25. That the Victorian Government raise with the Australian Government the merits of introducing a cadetship scheme for regional students. [Chapter 5.8]

26. That Victoria endorses the challenging Australian Government ambition of raising the proportion of people in the lowest SES quartile participating in undergraduate higher education to 20 per cent by 2020, based upon the demographics of the Victorian population. [Chapter 6.1]

27. That, in order to widen participation in higher education from young people in under-represented groups, the Victorian Government establishes a significantly enhanced coordinated and integrated approach to raise their aspirations and attainment levels. Considerations in the approach should include information about: income support; employment; course selection; selection procedures; the availability of scholarship programs; and Indigenous education strategies. [Chapter 6.3]

28. That the Victorian Government investigates extending early childhood outreach programs to enable a greater number of low SES children and parents to participate. [Chapter 6.7]

29. That the Victorian Government works with the Australian Government to ensure that income support arrangements are adequate and effective. [Chapter 6.10]

30. That the Victorian Government should initiate a study to understand rates of attrition in priority fields of study and the reasons driving these rates. [Chapter 6.15]

31. That by 2025 each non-metropolitan administrative region should achieve at least a 10 percentage point increase in the proportion of people in the 25 to 34 age group who attain a bachelor degree qualification; and that by 2020 each non-metropolitan region should achieve at least a five percentage point increase in the proportion of higher education undergraduate enrolments of people from a low SES background. [Chapter 7.2]
32. That the Victorian Government puts in place initiatives to promote linkages between enterprises by extending its Regional Innovation Clusters Program on an industry sector basis in immediately relevant priority fields where these do not already exist. To this end the Victorian Government should establish an industry/tertiary education network program to assist formation of joint industry/education networks. [Chapter 7.3]

33. That a pilot project is initiated in a regional location to build regional aspirations towards participation in higher education. The project should involve engagement with schools, students and their families and include:
   > information about university courses and career advice, including individually tailored advice and mentoring
   > information about Australian Government financial assistance to students and how families in the regions can best use payment mechanisms
   > university outreach. [Chapter 7.6]

34. That the Victorian Government initiate an overarching policy and planning framework to: facilitate State-Commonwealth relations; provide an overview of, and coordinate and encourage active planning and collaboration within, each of the regions; and provide an overview of how education and training needs connect with industry and labour market needs. Goals for attainment and participation in higher education and in vocational education and training could be monitored and aligned. [Chapter 7.6]

35. That the Victorian Government supports and contributes to the current review of regional loading and funding by the Australian Government. The Victorian Government should advocate the use of rigorous and accurate costing methodologies and also advocate that the Australian Government implement its findings as quickly as possible and put in place transitional arrangements prior to the implementation of the long-term funding arrangements. [Chapter 7.7]

36. That the Victorian Government endorses current directions of development for higher education provision in outer Melbourne as a result of projected population growth and progressively monitors the advance over time, with attention to:
   > achieving an appropriate balance between TAFE and higher education provision
   > ensuring education provision harmonises with industry needs and labour market priorities
   > developing and sustaining effective working relations with schools and school authorities in the regions [the Northern, Western and Southern Regional Offices respectively]. [Chapter 7.10]

37. That the Victorian Government identifies the need for, and the feasibility of, expanding the defined list of foundation programs to include university entrance programs for domestic students – as are currently offered to international students. [Chapter 8]

38. That the Victorian Government facilitates more consistent arrangements for, and develops a draft protocol around, the use of shared infrastructure by tertiary institutions. [Chapter 8]

39. That the Victorian Government establishes a competitive Partnerships Facilitation Fund to facilitate partnerships between TAFE and higher education institutions where complete or partial degree level qualifications can be delivered using existing Victorian infrastructure and resources. [Chapter 8.3]

40. That the Victorian Government works with institutions to devise entrance processes to tertiary education that will enhance and complement the ENTER. These should take the form of a common framework of mechanisms that assess student capacity, aptitude and motivation. Principles of transparency, equity and efficiency should guide their use. [Chapter 8.6]
CHAPTER 01: SCOPE AND CONTEXT OF A TERTIARY EDUCATION PLAN

Victoria enjoys the benefits of a modern economy that continues to develop and change to meet the needs of the community and gain advantage at local, national and global levels.

An essential component of sustaining such a developing knowledge-based economy is an effective system of education and training. The institutions, staff and programs which constitute such a system need to demonstrate a capacity to adapt and to grow and to be sustainable, individually and collectively. Fortunately, Victoria has a system of schools, colleges, institutes of Technical and Further Education (TAFE) and universities, which continues to serve it well.

In seeking to develop a Tertiary Education Plan covering the period to 2025, the Victorian Government needs an assessment of the future capacity of the State’s post-school institutions to meet the several targets and goals to which it has committed.

In 2008, 88.7 per cent of 20 to 24 year olds had completed year 12 or its equivalent, an increase of 6.9 percentage points since 2000 and consistently higher than the Australian average and all other Australian states, second only to the ACT. Through the Council of Australian Governments (COAG), Victoria has signed up to lift the year 12 or equivalent completion rate further.

Victoria is committed by 2020 to halving the number of people of working age (15 to 64) who are without post-school qualifications and to doubling the number enrolled in diploma and advanced diploma courses in vocational education and training (VET).

The Panel has been asked to focus primarily on parallel targets for the growth and development of higher education within this broader context. As developed in detail further in this Report, the national growth target is for 40 per cent of the population aged 25 to 34 years to have attained a bachelor degree by 2025. At the same time, an important equity target has been set: to enrol no less than 20 per cent of the low socioeconomic status (SES) quartile (i.e. 25 per cent of the population) in undergraduate education by 2020.

In the past, the provision of higher education has been seen exclusively as the province of universities. While this is still largely the case, a positive development (as viewed by the Panel) in recent times has been the complementary development of a relatively small number of higher education programs in TAFE institutes, formally accredited through established State mechanisms and registered nationally. This increases choice, enables students already associated with the institute to advance in a known and secure setting and contributes further highly qualified graduates in areas of economic need.

It should be added that further development of private providers of higher education is anticipated across the time period of the Plan. The private provision of higher education, unlike the substantial scale of private provision in school education, has been small to date. Yet to name but a few institutions is to demonstrate their diversity: there are well known business colleges of high standing now offering bachelor degrees; there is the Marcus Oldham Agricultural College; the Melba Conservatorium of Music; and the Melbourne College of Divinity which for decades has provided theological training.
1.1 THE ESTABLISHMENT OF THE EXPERT PANEL

The Australian tertiary education sector is about to undergo a major transformation as a result of the Australian Government’s commitment to expand participation and improve equity broadly in line with the ambitious targets recommended by the Review of Australian Higher Education [2008], known and referred to here as the Bradley Review.1

In April 2009, the Minister for Skills and Workforce Participation, the Hon Jacinta Allen MP, appointed an Expert Panel to report on and inform the development of a Victorian Tertiary Education Plan to provide for substantial growth in tertiary education provision in Victoria for the period to 2025, arising out of the Australian Government’s responses to the Bradley Review. Biographical details about the Panel members are at Appendix 1.

At the outset the Minister identified three major issues for the Panel’s immediate attention:

> addressing the continuing high level of unmet demand in Victoria, with particular consideration for additional university places for the 2010 and 2011 academic years
> examining outer urban and regional higher education provision
> the architecture of the proposed national accreditation and regulatory agency.

The Panel’s objectives were to report and provide specific advice to the Minister and the State Government on the development of a plan for the growth of tertiary education in Victoria to 2025. Within this Report there is a focus on higher education which is set within the broader context of tertiary education.2

The process of producing this Report was not intended to replicate the Bradley Review: extensive consultations with hearings and/or a formal submission-based process were not part of the Panel’s brief. Neither was it intended that this Report provide a comprehensive re-writing of the many excellent papers and reports already produced by universities and government departments on these issues. Specifically, given the recent release of Thinking Global: Victoria’s Action Plan for International Education and the Australian Government’s response to the Cutler review on innovation, these topics are not covered in detail here either.

This Report provides a range of data that the Panel used to inform its understanding of the tertiary education landscape in Victoria. This data enabled the Panel to assess the broad trends of the past few years and the directions in which Victoria needs to progress in the future. Further and in-depth analysis of the key issues under consideration may result in changes to this data.

1.2 METHODOLOGY

The Minister and the Panel chair, Professor Kwong Lee Dow, held a series of roundtable forums and consulted with university vice-chancellors, regional and outer urban provision representatives, high school principals and students, government departments and industry representatives.

The Panel also met regularly with experts in the field and conducted follow-up meetings with stakeholders. The Panel was supported by Skills Victoria and a dedicated Secretariat. Full details of the roundtables and attendees are at Appendix 2.

A wide range of papers, reports and websites were consulted in the preparation of this Report. The timely release of the Victorian Parliamentary Education and Training Committee’s report on its Inquiry into Geographical Differences in the Rate in which Victorian Students Participate in Higher Education (July 2009) was especially helpful. The Panel commissioned work from Dr Daniel Edwards from the Australian Council for Education Research and Dr Chandra Shah from the Centre for the Economics of Education and Training.

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2 Tertiary education covers higher education, vocational education and training (VET) and some other terms of post-secondary education.
1.3 INTRODUCTION

In June 2009, Victoria’s population was estimated to be 5.4 million (accounting for approximately 24.7 per cent of Australia’s total population of nearly 21.9 million). Seventy per cent of the Victorian population resides in Melbourne. In 2008 Geelong had a population of 212,000; Bendigo had 100,000; and Ballarat had 92,000.

Over the last fifteen years, Victoria’s universities have stabilised, following some amalgamations with former colleges (colleges and institutes of technology, and teachers’ colleges) and associated campus reorganisation. There are now eight universities, each established under Victorian legislation, and the multi-state Australian Catholic University. Between them they have many campuses in inner Melbourne and mid-suburban Melbourne, some in outer urban Melbourne, in each of the major regional cities (Geelong, Ballarat and Bendigo), and in other regional centres such as the La Trobe Valley, Warrnambool, Albury-Wodonga and Mildura. While two of the universities are headquartered in regional centres (Deakin and Ballarat), most of Victoria’s universities have regional involvement – some of which are quite substantial in scale.

Victorian universities make a significant contribution to the economy of metropolitan and regional communities. Within Melbourne the university community comprises over a quarter of a million people, staff and students, or 5 per cent of Victoria’s resident population. In the City of Melbourne alone students make up 40 per cent of the resident population of 62,000 – and about half are international students, with all that implies in terms of economic and cultural activity.

In 2007, Victorian universities:

- generated revenues of $4.6 billion
- directly employed 28,100 people
- held gross assets of $19.7 billion.

Victorian universities are one of the key contributors to the State’s economic, social and cultural development. As well as their traditional activities relating to teaching and research, universities also engage in ‘third stream’ activities that have both economic and social benefits. These include knowledge transfer and community service and engagement.

There are more than 1,300 public and private providers registered to deliver VET in Victoria, including 14 stand-alone TAFEs and four multi-sector universities. Tertiary education and training is also provided through approximately 350 publicly-owned adult and community education providers.

TAFE institutes offer a wide variety of courses and are distributed across the State, with approximately 100 separate campuses. Eight of the 14 stand-alone TAFE institutions and one multi-sector institution have headquarters in regional Victoria and two of the metropolitan-based TAFE institutions have regional campuses.

1.3.1 The economic, social and cultural effects of higher education

Universities and other higher education providers play a key role in human capital development and innovation systems. Growth and innovation cluster in areas where there are concentrations of skilled and creative workers, research and infrastructure for innovation. Cities and regions – or states, in the Australian context – that create the best conditions for growth and development, increasingly have a competitive advantage.
The acquisition of skills and qualifications is a key contributor to the economic success of individuals as well as to a nation’s general living standards. Completing school and participating in further education has a significant effect on the earnings capacity, employability and productivity of individuals. More highly educated workers receive higher earnings and are less often exposed to unemployment. For example, in 2005, on average, a full-time worker with at least a bachelor degree earned 65 per cent more per week than a full-time worker without a degree (ABS, 2005). When costs and offsets are considered the gain is still around 15 per cent, which equates to a total gain in earnings of around $300,000 in a lifetime (based on earnings in 2000). One estimate suggests that an average increase of one year of upper secondary schooling contributes a 1.2 percentage point growth in GDP.\(^6\)

Improvements in education levels also produce broad social and cultural benefits, including better public health, lower rates of crime, environmental gains through a more active and aware citizenry, educationally supportive parenting and greater social cohesion. More highly-educated people tend to be healthier – even allowing for the health benefits associated with their higher income – and less reliant on income support and welfare. Education also appears to have a socialising effect on young people who remain in school and therefore lessens the risk of criminal activity.\(^7\)

**The Graduate Premium**

For the individual, undertaking education and training confers personal benefits in the tangible form of income and enhances their ability to participate in society and contribute to the economy:

- higher education (like all educational achievement) is a positional good. Its benefits are not only economic (as in the so-called ‘graduate premium’ of lifetime earnings), but also relate to broader aspects of health, happiness, community security and democratic tolerance … The dis-benefits of not learning are correspondingly huge [David Wilson, Vice-Chancellor, University of Brighton, UK].

There is a clear relationship between educational attainment and average earnings. Specifically, as the level of education of an individual increases, earnings also increase. Individuals who have attained post-secondary non-tertiary or tertiary education enjoy substantial earnings advantages compared with those who have not at least completed upper secondary education.

Research by the Australian Bureau of Statistics (ABS) shows that in 2005 the average weekly earnings of full-time employees was $790 for those whose level of highest educational attainment was Year 10 or below, compared to $1,624 for those whose level of highest educational attainment was a Postgraduate Degree.\(^8\)

Given that labour demand in high-skill occupations continues to grow at a faster rate than for other occupations, the economic, social and cultural gains associated with higher level skills and qualifications is a key issue for governments around the world.
1.3.2 Meeting the educational needs of the Victorian community

The Victorian economy is undergoing a transformation – from a base largely focused on manufacturing to one that provides a range of services and activities that emphasise innovation and is reliant upon knowledge generation and the development of new technology. As a result, the main source of the rapid growth in employment in Victoria in the last decade has been in professional occupations in the government, administration, education and health sectors. In the period 2003-08, for example, 30.5 per cent of employment growth occurred among those in professional level occupations, which has led to a significant increase in demand for university-qualified employees. In addition, the process of job enrichment or skill deepening is recognised as increasing the demand for more highly-qualified workers. At no other time have universities been so central to Victoria’s – and Australia’s – economic development.

The findings of a study of industry demand for higher education graduates projects the total requirements are for 694,000 graduates between 2008 and 2022. After considering the contribution of migration to graduate labour supply, a shortfall of 49,000 graduates is projected for Victoria for this period unless commencing numbers grow substantially. There is, therefore, a strong existing economic need to increase significantly the number of people with tertiary education qualifications in Victoria.

As well as meeting the needs of the economy, the Victorian Government has also committed to promoting and further expanding the social and cultural benefits that arise from having a more highly qualified population.

CHAPTER 02:
THE ROLE OF STATE GOVERNMENT

The State Government has a fundamental role to play in underpinning Victoria’s transition to a knowledge economy and supporting and facilitating the development of human capital. International economic evidence supports the importance of innovation, skills and knowledge as key elements of the ‘knowledge economy’. For example, the OECD report, Cities and Regions in the New Learning Economy [2001], found a strong relationship between educational attainment and economic performance and that research and development (R&D) intensity was strongly correlated with economic performance at the regional level.\(^ {11}\) The report states:

> Policy makers (at the regional/State level) are the only regional agents able to coordinate several policy areas and thus increase organisational learning by matching regional education and public R&D to industry, while providing supporting investment in transport and communications infrastructure, welfare and culture.\(^ {12}\)

Crucially, the study concluded that regional/state policies can have a significant impact and that state governments are vitally positioned to influence the operation of the knowledge economy within and across their borders. Similarly, they are best positioned to take an integrated view of the whole process of the formation of human capital, including pre-school, school, post-school education and training and the transition to employment, and to adopt whole-of-government approaches.

The higher education sector is a key enabling sector, generating skills and knowledge for the business, industry, community and government sectors as well as being a significant knowledge-based service industry in its own right. The sector is therefore central to Victoria’s economic development.

> Individual regions [such as the State of Victoria], through their distinctiveness are often better placed than nation states to develop competitive advantage in their local industries. By focusing on their areas of research strength and improving their linkages with industry in the regions [State] as well as their local communities, universities are in a unique position to transfer knowledge and skills into initiatives for economic growth, environmental improvement and community development.\(^ {13}\)

As well as being a key foundation for most other industries in Victoria, higher education is a substantial industry in its own right. It is Victoria’s largest export industry in terms of revenue; is relatively unaffected by domestic economic cycles and actually has some counter-cyclical characteristics; will not move core operations interstate or off-shore; and generates economic benefits that are largely captured within the State.

\(^ {11}\) In OECD terms, the State of Victoria is a ‘region’.


\(^ {13}\) www.dest.gov.au/archive/uniatlas/paper/chap1.htm
Nationally and internationally, the environment for higher education is becoming increasingly global, competitive and complex. In Australia, there has been a long-term shift away from public funding for higher education and a gradual opening of the higher education market. Resource pressures continue to be intense and the cost of leading edge research and teaching is escalating. In an increasingly complex and competitive environment, this produces a continual focus on restructuring between, and within, institutions. There is increased competition for staff nationally and internationally, because the academic workforce is ageing faster than the workforce generally. International student demand has fallen from some key countries and is now being sustained primarily by growth from China and India. As all Asian countries build their own educational capacity and some actively target education exports, competition is increasing. The population is ageing, which increases the economic importance of educational participation to boost productivity and, at the same time, reduces the pool of available young people in the traditional student age groups. In recent years, prior to the recent economic downturn, domestic student demand had softened, due principally to the strong labour market. While it is difficult to predict how the recent economic downturn will affect student applications, in times of higher unemployment, people generally tend to stay in, or return to, education. Significantly, there was a 6 per cent increase in applications for higher education in 2009.14

Since the mid-1970s state governments in Australia have tended to play a secondary role in higher education policy because of the dominant influence of the Australian Government’s funding power. There has been a reluctance to intervene directly because of concerns that intervention might lead to the substitution of state for Australian Government funding. The Panel is not aware of any evidence that would suggest that the Australian Government has reduced funding to any state that has provided resources for higher education institutions, whether for infrastructure, teaching or research purposes. In fact, where states have provided funding, they have been able to leverage additional contributions from the Australian Government, industry and philanthropic sources. Given the fundamental importance of higher education institutions to Victoria’s economic development, there is now a strong case for the Victorian Government to adopt a more strategic role in its engagement with higher education.

The Panel views the funding of recurrent costs as clearly the role of the Australian Government. However, the Panel believes the Victorian Government should be involved in ensuring there is an effective flow of funds from the Australian Government and that part of the Victorian Government’s role is to leverage and advocate for funds on behalf of the higher education sector and to coordinate through integrated planning those state responsibilities that intersect with the higher education sector including schools, VET, transport, and infrastructure planning.

All Australian state governments have moved, to some extent, beyond their minimal legal responsibilities for accreditation and registration functions in higher education. With the increasing significance of the knowledge-based economy to the states, a number of governments have moved to adopt a stronger and more strategic position in relation to their higher education sectors.

Investment in higher education by the Victorian Government

Public funding for universities in Australia is predominantly an Australian Government responsibility. Among State Governments, Victoria provides the strongest level of support for its universities. In aggregate, the Victorian Government provides approximately one half of the total of State Government funding for universities in Australia.

Governments levy taxes on university payrolls in every Australian State and Territory. In 2007, the Victorian Government provided three times more in financial assistance than it collected in payroll tax from universities.

**TABLE 1: UNIVERSITIES IN VICTORIA – STATE GOVERNMENT FINANCIAL ASSISTANCE (2007)**

<table>
<thead>
<tr>
<th>State and Local Government Financial Assistance ($’000)</th>
<th>Payroll tax paid ($’000)</th>
<th>Payroll tax rate</th>
<th>Ratio of State and Local Government Financial Assistance to payroll tax paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>54,319</td>
<td>145,540</td>
<td>5.9%</td>
</tr>
<tr>
<td>Victoria</td>
<td>345,597</td>
<td>117,613</td>
<td>4.7%</td>
</tr>
<tr>
<td>Queensland</td>
<td>92,587</td>
<td>87,478</td>
<td>4.5%</td>
</tr>
<tr>
<td>Western Australia</td>
<td>79,707</td>
<td>47,396</td>
<td>5.3%</td>
</tr>
<tr>
<td>South Australia</td>
<td>36,232</td>
<td>30,419</td>
<td>4.6%</td>
</tr>
<tr>
<td>Tasmania</td>
<td>17,901</td>
<td>9,170</td>
<td>5.1%</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>62,679</td>
<td>5,987</td>
<td>5.8%</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>2,251</td>
<td>28,414</td>
<td>6.2%</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>4,208</td>
<td>4.5%</td>
</tr>
<tr>
<td>All Institutions</td>
<td>691,297</td>
<td>456,245</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

The Victorian Government has invested considerably in Victoria’s regional universities. In recent times, this has included more than $37 million in university infrastructure through the Regional Infrastructure Development Fund. The Government has also committed over $32 million to support health services to provide the infrastructure required to provide clinical placement for an additional 220 medical student places; $7.5 million for medical clinic academic posts; $14.5 million for a regional dental school at Bendigo; and, over a ten year period, $620 million for the Science and Technology Initiative.15

The OECD Review of Higher Education Institutions in Regional Development (2008) contains ten policy principles for creating learning cities and regions. Principles 1-4 and 7-9 are particularly significant and relevant to the potential role of the Victorian Government:

Inputs to the learning process

1. Ensure that high-quality and well-resourced educational provision is in place, on which effective individual learning throughout people’s lives can be developed.

2. Coordinate carefully the supply of skilled and knowledgeable individuals through education and training and the demand for them within the regional economy, so that the full benefits of individual learning may be reaped through its effects on organisational learning.

3. Establish appropriate framework conditions for the improvement of organisational learning, both within firms and between firms and other organisations in networks of interaction, and demonstrate to firms the benefits of these forms of learning.

4. Facilitate effective organisational learning not simply for a pre-selected set of conventionally defined ‘high-tech’ sectors, but across all those industries and services within the regional economy that have the potential to develop high levels of innovative capacity.

5. Identify very carefully the extent to which the resources currently available to the region (existing industries, educational provision, research facilities, positive social capital and so forth) constitute an impediment to economic development (‘lock-in’) or may usefully contribute in developing innovative strategies for the future.

6. Respond positively to emergent economic and social conditions, especially where this involves the ‘unlearning’ of inappropriate practices and bodies of knowledge (including policy makers’ own) left over from the regional institutions of previous eras.

Mechanism of the learning process

7. Pay close attention to mechanisms for coordinating policies across what have generally been separate departmental responsibilities (for industrial development, R&D, science and technology, education and training and so forth) and between different levels of governance (regional, national and supra-national).

8. Develop strategies to foster appropriate forms of social capital as a key mechanism in promoting more effective organisational learning and innovation.

9. Evaluate continuously the relationships between participation in individual learning, innovation and wider labour market changes, especially with respect to the social exclusion of groups within the regional population.

10. Ensure that the regional strategy for learning and innovation is accorded legitimacy by the population of the region to be transformed.\(^\text{16}\)

In the Panel’s view, it is imperative that the Victorian Government has a strong and integrated capability to analyse and contribute to policy debate across the various dimensions that affect the operation of the higher education sector and its contributions to the state.

The Panel believes that the Victorian Government should not seek to restructure the higher education sector in Victoria. The Panel believes that the most appropriate approach for the Victorian Government is to encourage, facilitate and support developments in the public interest that emerge from the sector itself – not impose them. The Panel sees the state’s role as one of active participation in consultations with the higher education sector, and promoting and supporting change that is clearly in the public interest in areas of perceived priority. In addition, and importantly, it is the Victorian Government’s responsibility to intervene and act in the public interest in instances of market failure.

\(^{16}\) OECD, 2001, p. 128.
3.1 DEMOGRAPHIC CHANGES

In December 2009, the population of Victoria was estimated to be 5.428 million with an estimated 4 million people living in the Melbourne metropolitan area.17

Victoria has twenty large regional cities (with populations more than 10,000); eighteen of which experienced population growth between 2001 and 2006. In absolute terms, the largest growth was seen in the three largest cities: Geelong, Bendigo and Ballarat. While there was population growth in some regional areas adjacent to Melbourne and near regional cities, there was population decline in most of Victoria’s rural areas, most notably in the dry-land farming areas.18 Certain places in regional Victoria have greater opportunities for population growth than others; these include the Barwon, Loddon and Goulburn regions. Low growth is projected in western Victoria, with a decline in population projected for the Wimmera.19

In 2008-09, both Australia and Victoria had record levels of population growth. While the latest projections by the Department of Planning and Community Development (DPCD) show that Victoria is likely to grow by 2.3 million people between 2006 and 2036 and regional Victoria is projected to grow at an average rate of 1 per cent, recent figures have shown that in the past 12 months Victoria’s population has increased by 2.1 per cent (113,900). It is anticipated that an Australian Government ‘intergenerational report’ due in June 2010, will substantially revise upwards population growth forecasts to 2050 by around 20 per cent.

However, the DPCD projections show that regional Victoria’s population continues to age. Each year natural increase slows and by 2033, on current trends, the number of deaths will surpass the number of births. As Victoria’s population ages, certain areas within regional Victoria are projected to gain significantly through migration from Melbourne which is expected to reach 14,000 per year by 2036. Further, if regional Victoria’s current share of overseas migration is maintained, it is projected that 4,700 migrants per year will be added to the population of regional Victoria over the coming thirty years.20

Trends of population ageing are particularly significant in relation to developing and growing tertiary education provision. By 2036, 15 per cent of the population of regional Victoria is expected to be aged 75 or above, while in Melbourne only 10 per cent will be aged 75 and above. At the same time, 13.5 per cent of Melbourne’s population is projected to be aged 20-29, compared to 9.7 per cent in regional Victoria.21

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19 Ibid, p. 31.
21 Ibid, p. 33.
3.2 DEMAND FOR GRADUATES

According to the Census data, between 1996 and 2006 employment in Australia grew from 7.6 million to 9.1 million with 61 per cent of this growth in skilled occupations. The main source of growth (30 per cent of 1.5 million) was in professional occupations in the service industries (in government administration, education and health); 9 per cent in management; 16 per cent in associate professionals; and 7 per cent in tradespersons. This trend continued through the economic boom to 2008. Between 2003-08, employment in Australia grew by 1.2 million. Of this growth, 30.5 per cent occurred among those employed in professional-level occupations. The share of employment growth attributable to employment in the managerial and trade occupations was actually larger during this period than it was between 1996 and 2006 with managerial occupations comprising 20.9 per cent of all job growth and trade occupations, 11.9 per cent.

As outlined above, the structure of the Victorian economy is changing, moving away from a manufacturing base to be more services and innovation-oriented. This has caused a shift in the occupational structure of Victoria’s workforce and led to an increase in demand for employees with university-level qualifications. The public and private service industries are expanding with growth in government administration, education, and health and community service industries – dominated by public sector employers – and in the finance and insurance and property and business services industries, mostly based in the private sector. A bachelor degree qualification is usually the minimum requirement for entering professional occupations in both the public and private sectors.

The process of job enrichment or ‘skill deepening’ – the tendency for employers to demand a wider range of higher-level skills from their employees – is also important. The professionalisation of jobs in fields such as human resource management, marketing and financial planning, means that a bachelor degree is now required for most entry-level positions.

The demand for VET-level and degree-level credentials appears to run in parallel with relatively little overlap when age cohorts are taken into account. Diploma courses provided by TAFE and private providers and bachelor degrees at universities tend to cater to quite different age groups. In 2006, there were 112,542 enrolments in undergraduate degree courses in the 18-20 cohort and 31,712 enrolments in undergraduate degree courses in the 25 and above cohort.

Conversely, there were 37,473 enrolments in diploma and advanced diploma-level VET courses in the 18-20 cohort and 61,665 enrolments in diploma and advanced diploma-level VET courses in the 25 and above cohort.

3.3 ALIGNING VICTORIA’S NEEDS WITH NATIONAL TARGETS

With the introduction of a demand-driven funding system in 2012, the tertiary education system in Victoria will move from a ‘mass’ education system to one that will encompass universal entitlement. The universal entitlement of all Victorians to vocational education and training began in July 2009. In order to cope with increased demand from students and the need to supply larger numbers of highly-skilled and educated employees to industry and business in the future, both the Victorian VET and higher education sectors will need to grow substantially.
The Bradley Review examined the Australian higher education sector and its fitness for the purpose of meeting the needs of the whole Australian community and economy, as well as the future direction of the sector and options for reform. The key elements of the Australian Government’s responses to the Bradley Review are:

- the introduction of funding allocation based on student demand from 2012
- improving levels of attainment by adopting a target of 40 per cent of 25 to 34 year olds attaining a qualification at bachelor level or above by 2025, compared to an estimated 32 per cent in 2008
- widening access to higher education by lifting enrolments of persons of low SES background from around 15 per cent currently to 20 per cent by 2020
- additional funding to universities as a loading based on enrolments of persons from low SES background, rising from 2 per cent of funding in teaching and learning in 2010 to 4 per cent in 2012
- developing a more adequate funding model for regional delivery
- substantial reform of student income arrangements to better target payments to those students most in need
- introduction of at-risk performance funding for universities from 2012, equivalent to about 2.5 per cent of funding currently provided for teaching and learning
- better indexation arrangements and an examination of base funding levels for teaching and learning in higher education
- the establishment of a Tertiary Education Quality and Standards Agency to undertake regulation and quality assurance in the sector.

While the Australian Government has adopted the 40 per cent attainment target, which has been subsequently endorsed by the Ministerial Council for Tertiary Education and Employment (MCTEE), the Panel’s task is broader than simply considering how it might best be achieved in Victoria. While the focus on higher education is a first priority, and bachelor degree attainment is critical for this, it is not the whole story. Other levels of achievement are important for tertiary education, including the upper levels of vocational education and training. As detailed above, the Victorian Government has also committed to doubling the number of diploma and advanced diploma completions by 2020 and to halving the number of people who do not complete any form of post-school qualification by that date.

While much of the growth in the coming years will come from the achievements of those who are presently between 9 and 18 years old (who will be between 25 and 34 years old in 2025), the Panel suggests the Plan for tertiary education needs to accommodate enrolments and graduations throughout the working life of the population.

The following table shows the number of Victorians by age, from 20 to 69 years old, with bachelor degrees. While the majority are aged between 25 and 34 years old, a substantial number is outside this age range.
CHAPTER 03: IMPERATIVES FOR GROWTH


Table 2: Victorians with Bachelor degrees, by age group and where they obtained their degree, 2005.

<table>
<thead>
<tr>
<th>Age</th>
<th>In Australia</th>
<th>Outside Australia</th>
<th>Percent In Australia</th>
<th>Percent Outside Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 24</td>
<td>55,700</td>
<td>11,000</td>
<td>83.5</td>
<td>16.5</td>
</tr>
<tr>
<td>25 to 29</td>
<td>99,400</td>
<td>31,100</td>
<td>76.2</td>
<td>23.8</td>
</tr>
<tr>
<td>30 to 34</td>
<td>102,300</td>
<td>31,100</td>
<td>76.7</td>
<td>23.3</td>
</tr>
<tr>
<td>35 to 39</td>
<td>76,200</td>
<td>27,100</td>
<td>73.8</td>
<td>26.2</td>
</tr>
<tr>
<td>40 to 44</td>
<td>67,100</td>
<td>19,200</td>
<td>77.8</td>
<td>22.2</td>
</tr>
<tr>
<td>45 to 49</td>
<td>70,600</td>
<td>21,200</td>
<td>76.9</td>
<td>23.1</td>
</tr>
<tr>
<td>50 to 54</td>
<td>57,100</td>
<td>7,400</td>
<td>88.5</td>
<td>11.5</td>
</tr>
<tr>
<td>55 to 59</td>
<td>32,000</td>
<td>9,700</td>
<td>76.7</td>
<td>23.3</td>
</tr>
<tr>
<td>60 to 64</td>
<td>22,200</td>
<td>8,000</td>
<td>73.5</td>
<td>26.5</td>
</tr>
<tr>
<td>65 to 69</td>
<td>15,100</td>
<td>4,500</td>
<td>77.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>


The concept of universal entitlement means that accessibility to higher education is an opportunity that all Victorians should have – whatever their age – assuming they have the aspiration or need and the capacity to participate. Many of the emerging distance and blended education models will be equally suited to the needs of mature age Victorians – many of whom are already in the workforce and/or needing to up-skill – as they will be to younger people.

The Panel believes it will be important for the Plan to encourage lifelong learning and the habit of continually updating and refreshing education and training. It will also be important to recognise that the needs of older students may be considerably different to those of younger students, such as recent Year 12 completers.

Lifelong learning

The effort of all governments working together on reform, underpinned by clear goals of what needs to be achieved in these areas, is critical to ensuring that all Australians have access to the quality education, training and support they need to be equipped for a life of success in learning and employment (Council of Australian Governments Meeting, 3 July 2008).

Lifelong learning is a fundamental response to the significant demographic challenges concerning the supply and demand for labour in an increasingly tight market. It also brings a number of professional, social, personal and intrinsic benefits to the individual.

Tackling labour market challenges

Given the ageing of the Australian population, we can no longer rely as heavily on young people as the primary suppliers of new workforce skills. There has been a significant shift in the composition of the labour market in the past three decades. In the late 1980s, people under 45 years of age made up 76 per cent of the market; by the late 1990s, the number of workers under 45 years of age had declined to 69 per cent. It is projected that, by 2016, workers under 45 years of age will make up 58 per cent of the labour market.
How do we facilitate lifelong learning?

Lifelong learning is underpinned by ease of access to, and the ability to move through, flexible, integrated primary, secondary, tertiary and further systems of education.

The expectations of older students are different to the expectations of younger students. Many are in the workforce and have family commitments. In addition, the modern workforce is becoming increasingly more flexible, mobile and innovative. The tertiary sector must adapt to meet the fluctuating needs of the average worker throughout their working life.

At present workers 45 years and above receive the lowest levels of formal training. They have increasingly come to be viewed as ‘de-skilled’ in the context of technological advances. To compound this issue, the education and training system lacks the structural flexibility which makes it more accessible to older workers with specific time and cost commitments. In short, the current ‘reward’ for investing in further education is not matched by the financial expenditure and time commitments required.

Fundamentally, older workers are looking for:
- short, specifically targeted pathways and modular learning
- ‘bite sized’ programs
- flexible, user-friendly services
- open access
- recognition of unique learning strategies
- improved marketing to employers
- recognition of prior learning
- off-campus delivery.

National attainment data for 2009 has been released as this Report is being concluded, which shows a significant rise in the percentage of 25 to 34 year olds holding bachelor degrees. This rise is very likely due to major increases in migration, with the contribution from net overseas migration (including international students who have remained on permanent and temporary visas) exceeding any increase in domestic Australian student completions.

Completions of VET qualifications (advanced diploma/diploma and below) have not risen in parallel. These numbers have been essentially constant over the past eight years. Therefore, it appears that the relative numbers of Australian domestic completions in the components of tertiary education (higher education and VET level 5 and 6 qualifications) have not changed much in recent years.

Concern has been expressed by employers in some regional areas that disproportionate attention to bachelor graduates deflects from the need for apprentices and trainees as well as from VET-qualified people. Apprentice numbers fell between 2008 and 2009, due to the global financial crisis reducing the employment opportunities for apprentices. In many cases, it is not possible to gain an apprenticeship without being employed.
These are complex matters and genuinely comparable data between these qualifications is limited.

The Panel modelled what achieving the 40 per cent target by 2025 would mean. Factors taken into consideration included the number of annual completions and initial commencements required on a year-by-year basis. In addition, assumptions were made about transition rates and completion rates through four-year degree courses. Contributions from net overseas migration were assessed and projections made relating to the extent to which international students might remain in Victoria after completing their courses.29

The Panel formed the opinion that a rate of bachelor degree attainment for 25 to 34 year olds of about 47 per cent by 2025 is required to meet Victoria’s needs in an era of economic advancement and substantial population growth. This figure also aligns with an estimated attainment rate of 46.5 per cent, which would be required in Victoria if the Bradley attainment target of 40 per cent Australia-wide is to be met, assuming that present interstate variations in attainment rates continue.

**RECOMMENDATION 1**
The Panel concludes that Victoria will need a rate of bachelor degree attainment in the order of 47 per cent of 25 to 34 year olds with a bachelor degree by 2025 and therefore recommends that the Victorian Government advocate to the Australian Government for the resourcing requirements to meet this need.

Table 3 gives the attainment numbers and rates that Victoria will need to achieve in order for Australia as a whole to reach the 40 per cent target set by Bradley. Victoria will need 422,300 of its 25 to 34 year old cohort to have a bachelor degree by 2025.

**TABLE 3: ATTAINMENT NUMBERS AND RATES FORECAST FOR THE VICTORIAN POPULATION, ASSUMING AUSTRALIA AS A WHOLE REACHES 40 PER CENT, 2006 TO 2025**

<table>
<thead>
<tr>
<th>Year</th>
<th>Change 2006 to 2025</th>
<th>2006</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATTAINMENT NUMBERS (’000 PERSONS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 to 34 year cohort</td>
<td></td>
<td>249.5</td>
<td>272.7</td>
<td>298.8</td>
<td>358.1</td>
<td>422.3</td>
<td>172.8</td>
<td>69.2</td>
</tr>
<tr>
<td>Victorian Total*</td>
<td></td>
<td>852.1</td>
<td>928.9</td>
<td>1,024.5</td>
<td>1,222.4</td>
<td>1,471.0</td>
<td>618.9</td>
<td>77.0</td>
</tr>
<tr>
<td><strong>ATTAINMENT RATES (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(PERCENTAGE POINT)</td>
<td></td>
</tr>
<tr>
<td>25 to 34 year cohort</td>
<td></td>
<td>34.0</td>
<td>34.6</td>
<td>34.7</td>
<td>39.8</td>
<td>46.5</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Victorian Total*</td>
<td></td>
<td>21.4</td>
<td>22.6</td>
<td>24.0</td>
<td>26.2</td>
<td>28.4</td>
<td>7.0</td>
<td></td>
</tr>
</tbody>
</table>

**THESE NUMBERS AND RATES ARE BASED ON VICTORIA CONTINUING ITS CURRENT NATIONAL CONTRIBUTION TO ATTAINMENT NUMBERS ASSUMING THAT AUSTRALIA REACHES THE TARGET OF 40 PER CENT ATTAINMENT FOR PERSONS AGED 25 TO 34 BY 2005.**

*VICTORIAN TOTAL COMPRISSES POPULATION AGED 20 YEARS AND ABOVE

**SOURCE:** ABS CENSUS, 2006 (N.S. AND INADEQUATELY DESCRIBED REMOVED WHEN MAKING CALCULATION) AND DPCD PROJECTIONS30


Detailed modelling reveals that in order to reach an attainment level of 47 per cent, Victoria will need to increase undergraduate commencement numbers by about 10,000-12,000 students per year across the period to 2025. Substantial increases will be needed as soon as possible to reach this goal.

The Panel’s assessment led to the overall conclusion that an attainment level of 47 per cent for Victoria is realistic, if ambitious:

- A significant part of the increase will come from unmet demand. In 2009, there were an estimated 6,400 Victorian students who were deemed eligible and applied to enter university, but who were unable to get Commonwealth-supported places. The Panel believes this number to be understated, however, and that a more meaningful estimate would be nearer 10,000.31
- About 25 per cent of attainments will come from overseas migration and international students, who take up permanent residency, and form part of the 25 to 34 year old cohort
- Strong and sustained growth in tertiary education in Victoria will be required over the next 15 years and, in order to increase attainment to the required levels, the Victorian Government will have to implement a wide range of innovative policies and strategies.

The Panel stresses the need for governments to move as quickly as possible. The Panel’s estimation of an additional 10,000 to 12,000 commencements is an average across the period from 2010 to 2025. To the extent that effort falls short in any year – as it seemingly will in 2010 and 2011 – additional effort will be required in later years. While it is encouraging to note that institutions achieved enrolment increases in 2009 above those in 2008, and the rise in the last two years contrasts with flat line levels in the previous few years, the Australian Government needs to act immediately to sustain the momentum of the present mood of willingness to expand. This willingness is attributable to the Australian Government’s expressed commitment to growth and its intention to fund the growth in the last years of the current budget cycle. In addition, institutions have begun to position themselves for the major shift to student demand driven funding from 2012. However, should the momentum for growth falter, it could be more difficult to stimulate growth at a later time.

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31 The methodology for calculating unmet demand applies a series of discounts to the number of unsuccessful applicants to remove school leaver applicants with low TERTs; multiple applications (that is, where one applicant applies to more than one Tertiary Admission Centre (TAC), and applicants with fewer than three preferences. The adjusted total is then discounted further to allow for the rate at which applicants reject offers. Undergraduate Applications, Offers and Acceptances 2009, Department of Education, Employment and Workplace Relations, www.deewr.gov.au/HigherEducation/Publications/HEReports/Documents/FINALAppsandOffers2009.pdf
CHAPTER 04: CAPACITY

One recent assessment of the infrastructure (space) costs for the 250,000 additional students to be educated Australia-wide over the nineteen year timeframe (2007 to 2025) is between $0.7 billion and $1.0 billion per year. This does not include replacing existing stock, only new space to meet the growth projections.32

This chapter, and indeed much in the chapters that follow, gives the Panel’s assessment of how well Victoria is positioned to deliver and achieve the level of growth projected, and specifically seeks to itemise and consider what the State Government needs to do and set in train to achieve these growth objectives.

A broad overall assessment of Victoria’s capacity to respond is given first, and this is followed by a number of critical key issues which together lead to the aggregate assessment. Some of these issues are considered principally in this chapter, but others, such as the equity challenge and the need to improve regional and outer urban participation, are of such magnitude and complexity as to require separate sections or chapters later in the Report.

4.1 CAPACITY OF THE VICTORIAN TERTIARY EDUCATION SYSTEM

The Panel believes that, at least for the next few years, the capacity for Victoria’s present institutions to expand – both universities and TAFE institutes working to a greater extent in partnership and in collaboration – means there is no pressing need to plan additional new institutions or to propose immediate major formal restructuring. This might be seen as a bold statement, given that the well-informed commentators Bob Birrell and Daniel Edwards earlier this year (2009) wrote that,

\[
\text{The recommended scale of expansion implies massive infrastructure investment in the higher education sector. An enrolment increase of 280,000 [for Australia-wide] or so would require the addition of 20 full scale universities catering, at least in their early stages, for around 14,000 university students each. There is simply not the space in existing university campuses to accommodate such numbers. Nor would it be advisable to locate most of the additional teaching and research facilities on existing campuses even if it were possible.}^{33}
\]

Part of the Panel’s reasoning begins with the acknowledgement of the large number of university campuses already positioned across Victoria, and the capacity that exists, at least in principle, to further use TAFE facilities for higher education programs if required. Examples include the Wellington Shire Council, based in Sale, East Gippsland, which has recently initiated collaborative discussions to gain a higher education site in Sale, where none currently exists. East Gippsland TAFE, headquartered in Bairnsdale, is soon to build a new campus in Sale. Space for higher education programs will be included in plans and

discussions between that TAFE institute and the University of Ballarat are ongoing. RMIT has been conducting programs in conjunction with East Gippsland TAFE and recently Deakin University also expressed a willingness to partner with East Gippsland TAFE in Bairnsdale through its Deakin at your Doorstep program (discussed later in this Report).

A second example relates to provision in the fast-growing outer south east urban area of Melbourne. Chisholm TAFE has major campuses at Berwick, Dandenong and Frankston and smaller centres at Cranbourne and on the Mornington Peninsula. Monash University is beginning a major partnership link with Chisholm across its adjoining Berwick campus. As higher education opportunities further develop in this outer urban area, it would be more sensible to base additional developments and initiatives at these existing sites rather than contemplate any new and separate institutional development. This pattern of development can be elaborated in many other parts of outer-urban and regional Victoria.

The Panel sees two principal drivers in the willingness of many Victorian universities to now plan for substantial growth. One is the competitive environment beginning in 2012, when students’ choice of course and institution determines the allocation and funding of student places in universities, replacing the well-established current process of allocation of places to institutions, and, to some extent, to course fields, by DEEWR in Canberra. Individual institutions will be in competition for quality students and are seeking to make their program offerings attractive both in terms of student interest and subsequent employment prospects.

The second driver is the commitment made by the Australian Government in its 2009-10 Budget, to provide a funded place for all Australian students enrolled by eligible institutions from 2012 and the commitment to additional funding for enrolling students from low SES backgrounds.

While it is not the intention here to systematically enumerate the plans of each university in Victoria, there are some useful examples of the positive approach tertiary institutions are adopting to the challenges of growth.

Monash University has made a clear public commitment to major expansion on its Berwick campus, to joint planning with Chisholm TAFE and generally to review and increase its commitments at its Peninsula campus at Frankston and its Churchill campus in the Latrobe Valley.

La Trobe University has developed new strategic plans, which underline a commitment to growth in the northern corridor of Melbourne in relation to its Bundoora campus, to recently funded significant initiatives in Bendigo and to sustaining its presence and commitment on campuses in northern Victoria at Mildura, Shepparton and Wodonga.

The Australian Catholic University has substantially increased enrolments in 2009 over 2008, anticipating the changes ahead to ensure a ‘pipeline’ is in place well before 2012.

Finally, in a major boost for Deakin’s Warrnambool campus, the University has in place a new two-year Associate Degree program, titled Deakin at your Doorstep, providing an accessible pathway to higher education focusing on students in regional areas, using leading edge technology to provide access centres at TAFE institutes including Sunraysia, East Gippsland and Chisholm. Beyond that, Deakin is creating the Deakin University Centre for Technology Education Partnerships to include student guidance services, employer advisory services, a program and pathway development unit and a workforce intelligence unit. The thinking behind this development is not only to reach an ‘attainment’ target, but to reach it in areas of emerging need for high-level skills and to directly involve and seek support from employers.

While less is known of the plans and possible scale of development from private providers, the overall picture in Victoria is of a diverse range of institutions across the tertiary sector, from world-class research-intensive universities to innovative industry- and community-engaged institutions, and a number of multi-sector institutions, fit for purpose and playing to their particular strengths.
While the Panel sees the current structures and arrangements as partly a product of historical development, which might, with advantage, have been done somewhat differently in the late 1980s and early 1990s, any further restructuring should be undertaken carefully, deliberately and after full analysis and enquiry, and should be institution-initiated and driven rather than government led. As was earlier observed, the basic role of the Victorian Government should be to facilitate, support and encourage, rather than seek to be directive and controlling, unless the clear interests of the State and the prevention of market failure warrant intervention. Given the notion of ‘shared responsibility’, any interventions would need to be in concert with the Australian Government, and be mindful of the self governing (and self-accrediting) status of a university.

These observations and conclusions serve to illustrate the major challenges that exist in responding to the imperatives for growth in higher education and tertiary education more broadly. While the Panel considers that existing institutional structures do not need to be radically changed in the short term, there are immediate and emerging problems with ageing teaching and research infrastructure and shortfalls in infrastructure capacity to cope with growth in student numbers. In some areas, infrastructure sharing arrangements between universities, and between universities and TAFE institutes, can be enhanced, but in others substantial new infrastructure will need to be created. More broadly, in some parts of Victoria there is still inadequate community IT infrastructure to support effective access to blended, e-learning and open learning opportunities.

Further challenges will emerge as the new demand-driven systems develop over coming years. It will be important for the Victorian Government to assess the capacity of tertiary education institutions across the State to provide the growth required in the locations where it is required. This would best be done through a series of focussed, integrated planning exercises commencing in priority areas of Victoria, such as the outer metropolitan areas of Melbourne where the capacity issues are anticipated. A recent pilot with Victoria University provides an example of such an approach, identifying supply and demand requirements and taking into account related issues such as transport and student housing. These planning processes should seek to identify the most effective approaches to growth, avoiding the creation of sub-scale campuses that cannot be operated on a sustainable basis.

**RECOMMENDATION 2**

That the Victorian Government assesses the state-wide current and planned capacity of tertiary education institutions against anticipated student numbers and identify shortfalls in:

- infrastructure and infrastructure sharing arrangements
- professional staff
- support staff

The Victorian Government should coordinate responses through submissions to the Australian Government.

**RECOMMENDATION 3**

That the Victorian Government works with institutions to assist them in planning for forthcoming major capital and IT requirements and developments.
CHAPTER 04: CAPACITY

RECOMMENDATION 4
That the Victorian Government commences integrated planning exercises in priority areas based on the pilot done with Victoria University, identifying supply and demand requirements by region and supporting the principle of avoiding subscale campuses. Integrated planning should involve tertiary institutions, local industry/employers, ICT representatives, transport and student housing issues.

There are several other key issues that will influence the capacity of the tertiary education system and the State more broadly to meet the challenges of growth.

Ageing academic workforce

A significant proportion of the current academic workforce will retire in the coming decade. In order to meet future needs, the academic workforce will need to grow. There will be major challenges for all institutions in attracting and retaining appropriate staff in an increasingly competitive, global academic labour market. There are likely to be shortages of academic staff in some disciplines where growth in student numbers has been limited and in areas where universities will be competing for staff with the professions. While principally an issue that must be addressed by the institutions as employers, there may be some measures that the Victorian Government can take to support their efforts in this area.

RECOMMENDATION 5
That the Victorian Government discusses with institutions the most effective way, if any, that the Government can assist in ensuring that academic workforce requirements due to growth in the sector can be adequately met in the future.

The traditional route to an academic career has been through teaching and research. But some disciplines could benefit from academic teachers with alternative background preparation. In addition, new and more diverse student populations may benefit from academic teachers with a variety of backgrounds. While of course a sensible balance needs to be maintained, people with extensive vocational experience in their specific disciplines (mathematics, sciences, business studies and so on) can be effective teachers, particularly for students in their early undergraduate years. There should be more than one route to an academic career. Such a broadening should be accomplished without needing to speak in terms of ‘teaching only’ staff, as if complex individuals need to be categorised once and forever. Given the initiatives from bodies such as the Australian Learning and Teaching Council, it would seem likely that additional routes for advancement will open in the coming years.
RECOMMENDATION 6
That some appropriately qualified staff may be identified in schools, TAFE institutes and universities, who could effectively teach students needing special attention and assistance at first or second year undergraduate level. Over time employment arrangements for limited numbers of such ‘expert teachers’ could allow them to build careers through work in more than one sector. As well, a pilot program could be initiated with an education faculty to prepare a stream of teaching staff with proficiencies to teach from say, year 11 and 12 through to first and second year undergraduate level.

Effective extension of blended and e-learning
The overall capacity of the system will be enhanced by the continuing extension of blended and e-learning opportunities to complement campus-based study. There is a cluster of inter-related issues concerning the effectiveness with which newer modes of learning from technology advances are integrated or ‘blended’ into mainstream undergraduate learning and teaching. Some highly effective and well-evaluated innovations are taking place, but there remain considerable opportunities for effective expansion. The potential role for e-learning, for open learning and for blended learning is discussed in more detail in the next chapter.

RECOMMENDATION 7
That, in order to achieve more widespread blended education models, the Victorian Government should work with institutions to identify examples of innovative teaching methodologies that may increase the diversity of learning experiences. Relevant information, including successful e-learning delivery methods, should be disseminated to all tertiary institutions.

The long term development of international education
The total scale of the tertiary education system will be determined, not just by the growth in domestic student numbers, but also by the continuing growth in international student enrolments. Over the past decade, international education has become increasingly important for Victoria. The rapid growth of this industry, initially in universities, but particularly now in the VET sector, has led to it becoming a highly significant component of the Victorian economy. International education makes a considerable contribution to the deepening understanding within the community of multiculturalism in a globalised world. In September 2009, the Victorian Government introduced the State’s International Education Strategy, Thinking Global. In her introduction, the Victorian Minister for Skills and Workforce Development stated that the action plan ‘will consolidate the success of Victoria’s international education industry in a time of considerable change. The strategy delivers a blueprint to address the challenges ahead and will give Victoria’s education providers the support they need to compete effectively in a dynamic and demanding global environment. The strategy will drive long-term sustainable growth in the areas where Victoria has a clear edge and globally recognised strengths.’ While the strategy concentrates mainly on the continued marketing, retention and growth of an industry that in 2008 was Victoria’s leading export, it also addresses issues such as attraction of overseas doctoral students and student welfare issues.
The Panel endorses this report and commends the Victorian Government for being the first state government in Australia to address these issues in light of the changing global position regarding the movement and welfare of international students.

### 4.2 SETTING FUTURE DIRECTIONS

The Victorian Government needs to address its own capacity to facilitate and support the development of the State’s knowledge economy in general and the higher education sector in particular.

*The Panel’s core conclusion is that the State Government should reconceptualise and strengthen its role in higher education in Victoria to underpin the State’s transition to a knowledge-based economy and as a key element of a broad human capital development strategy.*

As noted previously, this goes well beyond a focus on issues of educational policy and planning. For example, high levels of growth in student numbers will have implications for infrastructure such as transport, broadband and student accommodation. The Victorian Government needs to further develop an integrated planning capacity that embeds consideration of higher education participation in community, economic, infrastructure, social and cultural planning and policy.

Specifically in relation to tertiary education, the development and implementation of an effective Victorian tertiary education plan will require the Victorian Government to strengthen its capabilities to analyse, facilitate, influence and support developments in the tertiary education sector that are in the public interest. It will need to monitor the Plan, focusing on changes in attainments rates, enrolments, low SES and regional participation rates, and international student numbers. Above all it will need to ensure that the Plan is dynamic and able to accommodate the needs of the changing tertiary education landscape.
<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>RECOMMENDATION 8</td>
<td>That the Victorian Government reconceptualises and strengthens its role in higher education in Victoria to underpin the State’s transition to a knowledge-based economy and as a key element of a broad human capital development strategy.</td>
</tr>
<tr>
<td>RECOMMENDATION 9</td>
<td>That the Victorian Government strengthens its capabilities to analyse, facilitate, influence and support developments in the public interest that emerge from the tertiary education sector.</td>
</tr>
<tr>
<td>RECOMMENDATION 10</td>
<td>That the Victorian Government establishes processes across all its relevant planning activities that embed higher education participation in community, economic, social and cultural policies. In particular, higher education involvement should support a comprehensive approach to human capital development and the development of a knowledge economy.</td>
</tr>
<tr>
<td>RECOMMENDATION 11</td>
<td>That the Victorian Government coordinates through integrated planning those State responsibilities that intersect with the higher education sector including schools, VET, transport, and infrastructure planning.</td>
</tr>
<tr>
<td>RECOMMENDATION 12</td>
<td>That the Victorian Government develops a strong and integrated capability to analyse and contribute to policy debate across the various dimensions that affect the operation of the higher education sector and its contributions to Victoria.</td>
</tr>
<tr>
<td>RECOMMENDATION 13</td>
<td>That, having developed a Plan for Tertiary Education, the Victorian Government should continuously monitor it through formal reporting mechanisms. Particular areas of focus should include: attainment, enrolments, low SES and regional participation rates and international student numbers. It is essential that the Plan is dynamic and able to accommodate the needs of a changing tertiary education landscape.</td>
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CHAPTER 05: A DIVERSE, HIGH-QUALITY SYSTEM THAT MEETS INDUSTRY NEEDS

An effective tertiary education system in the future will require more than simply growth: it will need to be dynamic and responsive, diverse, high quality, and should meet the needs of industry, including small and medium enterprises and the needs of the professions.

Unfortunately, there are structural constraints in Australia that impede the achievement of this goal, which arise from the different historical developments and governmental responsibilities for the VET and higher education sectors. While some of the differences are justifiable and desirable, there are others that restrict easy movement of students through qualification levels, limit innovation by providers, impose regulatory and reporting burdens and introduce anomalies and inequities between students and staff. There are differences between the sectors in regulatory requirements, funding systems, industrial arrangements, even in the way students are counted. In practice, institutions and students are working around the barriers in order to meet community and industry needs, which include efficient movement between qualifications with appropriate credit, enabling TAFE institutes to deliver higher education qualifications, and providing TAFE students with access to income contingent loans. In a more rational system, the policy, funding and regulatory arrangements would allow such developments to occur dynamically without requiring ‘work arounds’, duplication of effort or special one-off initiatives.

These issues are not unique to Victoria, but they are more keenly felt here because of the number of the State’s multi-sector institutions and the scale of their activities as significant providers of both higher education and VET. There is a growing impetus across the country to tackle the systemic constraints in order to create a more connected tertiary sector. The Panel sees this as a fundamental direction for reform that must be supported and actively pursued.

RECOMMENDATION 14 That the Victorian and Australian Governments need to create a more consistent policy framework across the tertiary sector. Such a framework should address:

> funding
> quality assurance and regulatory arrangements
> student financing
> industrial issues

The framework should be evaluated against its capacity to encourage student progress through levels of the Australian Qualifications Framework (AQF).
5.1 ENCOURAGING DIVERSITY

While the program and course offerings within Victorian universities have much in common and broadly seek to maintain comparable standards, in other ways there is considerable diversity between them, and in some cases considerable diversity between the various campuses of a single institution. Similarly there is diversity among the 14 public TAFE institutes – diversity in scope and scale and in the kind of relationships they are able to sustain with their own communities and stakeholders.

Some informed institutional leaders and observers see this system of institutions further evolving to encompass what are described as polytechnics and community colleges. Over time, some changed structural arrangements, including mergers, may well be appropriate. At this point, the Panel is not advocating any particular change in direction and believes that when new proposals emerge, they need to be treated seriously, carefully and systematically. That has not always happened in the past and unnecessary destabilisation and less than optimal arrangements have sometimes followed.

In seeking to encourage diversity in learning and teaching through better use of open learning, e-learning and blended learning methodologies, the Panel sees some anomaly in the present arrangements by which students and institutions access programs of Open Universities Australia (OUA). Details of OUA follow. To support the widening of the ambit of OUA subjects and courses, the Panel offers its support of the principle of OUA receiving public funding for appropriate students.

Open Universities Australia (OUA)

OUA, which is owned by seven Australian universities, currently offers more than 750 units and 60 qualifications from 100 subject areas. Most of its courses are delivered online. The combination of flexible study options and supported online learning offered by OUA has proved to be extremely attractive to a wide range of Australian students in recent years. While overall domestic student numbers have risen by seven per cent from 2001 to 2006, OUA enrolments have risen by 137 per cent (although this may be linked to broader access to income contingent loans through FEE-HELP for OUA students from 2005).

While many of the units are competitively priced, some units (such as science units) are much more expensive than those available to students who secure a Commonwealth-Supported Place (CSP) directly through a traditional university. This means that students who may have no choice but to choose the OUA option will generally have higher FEE-HELP debt than their counterparts who have better access to a traditional university campus.

OUA has for some time been calling for their students to have access to CSPs and Commonwealth Grant Schemes, both of which are available to their campus-based counterparts.

OUA appeals to a wide range of students and provides access to mature age students in the workplace wanting to up-skill. Importantly, from the perspective of the challenges of meeting the goals for the growth of tertiary education, OUA provides an important and valuable route to increasing student numbers.
5.2 RESEARCH AND INNOVATION

A different aspect of diversity among tertiary institutions in Victoria lies in their individual capacity for, and responsiveness to, research and innovation. While the two terms are often used together, this can sometimes be misleading. Institutions show considerable variation in their research attainments on the usual measurable indices, as is the case in most countries with substantial higher education systems. Yet all institutions should commit to innovation across all aspects of their endeavours. As these topics are dealt with extensively in other forums, the Panel has restricted itself to a limited overview.

According to the Cutler Report (2008), Australia’s investment in human capital has ‘stalled’. Since 1990, public investment in education has declined as a share of GDP and over the past decade there has been evidence of declining educational proficiency relative to other OECD economies.

Australia needs human capital to reinvigorate innovative activity so that growth in productivity and living standards is renewed and Australia’s capacity to deal effectively with major environmental and climate challenges is optimised.

A highly-skilled workforce is essential not only for the generation and application of new knowledge, but also to use and adapt the knowledge produced elsewhere. Formation of high-quality human capital requires attention at all levels of education from early childhood education and schooling, through vocational education and training, and higher education, and into the workplace. ‘Innovation is fundamentally a people-driven exercise and a nation’s capacity to innovate is inextricably linked to the breadth and quality and focus of its education and training systems’.34

Australia is falling behind developed and emerging economies in terms of its commitment to investment in research in universities as well as in research agencies, government and private bodies involved in public-funded research. Without support research institutions will not be able to attract the best researchers nor are they likely to be chosen as preferred partners for international collaborative research.

ABS data shows that in 2006 Australian universities earned $2.2 billion for research activities, but spent $5.6 billion. The Australian Research Council (ARC) only funds research projects to around 60 per cent of full direct costs and contributes nothing to indirect costs. Other funding sources [Institutional Grants Schemes and Research Infrastructure Block Grants] are insufficient to cover the shortfall. The shortfall is instead drawn from teaching and service income. In recent decades, this has contributed to the deterioration of infrastructure and staff/student ratios and thus inevitably to the quality of the student experience and to learning outcomes. The Cutler Report recommends fully funding the costs of university research activities and broad national education reforms with a focus on raising teacher quality.35

In 2009, in response to the recommendations of the Cutler Report, the Australian Government produced Powering Ideas – a ten-year reform agenda with the objective of building a stronger national innovation system.36 The reform agenda was released to coincide with major budget commitments relating to research and innovation. The agenda includes a range of National Innovation Priorities which focus on the production, diffusion and application of new knowledge.

35 Ibid.
In relation to expanding publicly-funded research capabilities, the Australian Government has specifically committed to:

- increasing the number of research groups performing at world-class levels, as measured by international benchmarks
- encouraging universities to organise themselves into research hubs and spokes and to pursue industry-driven research opportunities
- addressing the gap in funding for indirect research costs
- assisting smaller and regional universities to develop capacity by teaming up with other institutions
- increasing the capacity of public research organisations to participate in domestic and international collaborations and to undertake multidisciplinary research
- continuing to invest in infrastructure to support collaboration and to provide access to the latest technology

In relation to skills the Australian Government will:

- address the expected shortfalls in the supply of research-qualified people by developing a research workforce strategy
- increase the stipend for Australian Postgraduate Awards
- significantly increase the number of students completing higher degrees over the next decade
- create viable career paths for Australian researchers

To promote accountability the Australian Government will:

- allow universities to determine their own research and collaboration agendas in line with national priorities by introducing mission-based funding compacts
- measure the quality of university research and guide the allocation of resources by implementing Excellence in Research for Australia
- require universities to provide more meaningful data on research costs through activity-based reporting, and to meet specific performance targets to be developed in consultation with the sector.

Universities in Victoria have a long history of engagement with government, industry, and the community for the purposes of innovation and research.
TABLE 4: UNIVERSITIES IN VICTORIA – RESEARCH INCOME BY CATEGORY, 2007 ($M)

<table>
<thead>
<tr>
<th>Research Income Category (2007)</th>
<th>$m</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonwealth Competitive Grants</td>
<td>268,737</td>
<td>41.1%</td>
</tr>
<tr>
<td>Other Commonwealth Government Grants</td>
<td>88,309</td>
<td>13.5%</td>
</tr>
<tr>
<td>Non Commonwealth Competitive Schemes</td>
<td>14,084</td>
<td>2.2%</td>
</tr>
<tr>
<td>Local Government (competitive and non competitive)</td>
<td>1,787</td>
<td>0.3%</td>
</tr>
<tr>
<td>State Government (competitive and non competitive)</td>
<td>85,486</td>
<td>13.1%</td>
</tr>
<tr>
<td>Australian Industry Funding – Contracts</td>
<td>60,719</td>
<td>9.3%</td>
</tr>
<tr>
<td>Australian Industry Funding – Grants</td>
<td>37,790</td>
<td>5.8%</td>
</tr>
<tr>
<td>Donations Bequests and Foundations</td>
<td>30,847</td>
<td>4.7%</td>
</tr>
<tr>
<td>International Funding</td>
<td>35,392</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>653,869</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

SOURCE: OECD, REVIEW OF HIGHER EDUCATION INSTITUTIONS IN REGIONAL DEVELOPMENT, JUNE 2008.

The data in Table 4 indicates that in 2007 competitive grant income from the Australian Government amounted to 41 per cent of research income for Victoria’s universities. The Victorian Government provided 13.1 per cent of research income. This is an area where the Victorian Government has actively engaged with the higher education sector, particularly to tailor grant applications to meet Victoria’s needs and priorities.

The main expenditure on research by Victorian universities over the last five years was in medical and health sciences. Other significant research concentrations were in biological sciences, engineering and technology and management and commerce. There are a range of partnership agreements between universities where there are complementary capabilities and mutually beneficial outcomes. The Melbourne/Monash Protocol in medical research is one excellent example.

The Victoria University/University of Melbourne collaboration around the Teaching Training and Research (TTR) Centre is another good example of an intra-state complementary collaboration that benefits the whole of Victoria. Under this partnership, Victoria University delivers nursing and paramedical training and the University of Melbourne educates doctors.

To realise the greatest value of research and innovation, Victoria will need to make certain that there is continued effort to ensure that industry and researchers have the capacity to engage on an ongoing basis so that new knowledge can be translated into innovation and commercial outcomes. Therefore the State’s approach to university research and innovation should be of high priority in its broader industry policies.

To this end, the Panel considers that the Victorian Government could put more emphasis on assisting institutions to increase their research and development activity and innovation networks by:

> using State resources strategically to leverage more R&D funding from other sources
> assisting, through measures to attract and retain top performing researchers and research teams in the face of growing national and international competition
> reviewing current Victorian funding to institutions to ensure maximum leverage of funding from other sources
> taking into consideration OECD advice for cities and regions once the PURE project has completed its work on Victoria as a region.40

5.3 QUALITY, QUALITY ASSURANCE AND RESOURCING

Maintaining quality, and being perceived to be maintaining quality, is challenging in an expanding system, especially when new populations are entering higher education as first generation students. To take a parallel case: as year 12 participation rates grew from around 10 per cent in the 1950s, to 33 per cent in the 1970s and close to 90 per cent today, some argued that the system had been ‘dumbed down’, given that fewer take Latin, fewer enter Arts degrees with foreign language study from school or take advanced mathematics. Yet at the same time, most agree that the best students today are at least as able and high achieving as were their counterparts of yesteryear.

All the evidence indicates that Australian universities generally maintain a high level of quality. The Lisbon Council, a European think tank, in December 2008 ranked the university systems of 17 OECD countries. They found:

Of the 17 countries surveyed, Australia, United Kingdom and Denmark have the best tertiary education systems, ranking Nos. 1, 2 and 3, respectively, according to the criteria laid out in this analysis. Taken together, their universities accept among the largest number of the local population for study, giving them high scores on Inclusiveness and Access. But their universities are also attractive to foreign students, which gives these countries an important leg up in the global war for talent. And all three countries are frontrunners in the effort to offer continuing education to adults after they have left the formal education system, with high numbers of people benefiting from access to lifelong learning. Finally, all three have opened up their education systems to a wide range of people without lowering their educational standards. To the contrary, there is much evidence that the diversity and inclusiveness of their educational system has helped them raise standards in important ways.41

In looking to quality assurance mechanisms to test and account for quality, either internally within an institution or across institutions at a state or national level, the Panel believes it necessary at the same time to look at levels of resourcing. It is not meaningful to expect that regulatory mechanisms can ensure quality in an expanding system unless resourcing levels are rising at the same time. These two aspects are now considered.

5.4 TEQSA

It is understood that the Tertiary Education Quality and Standards Agency (TEQSA) will be located in Melbourne and will begin operations in January 2011. It will incorporate the functions of the Australian Universities Quality Agency as well as accrediting providers, evaluating the performance of education providers and programs and encouraging best practice. The proposed agency will ‘integrate regulation and quality assurance’ and will have three core roles:

> Supervision – the agency will develop collaborative relationships with institutions, providing a contact point for queries, facilitation and advice. The agency’s day-to-day function will be collaborative supervision.
> **Standards** – the agency will evaluate institutions against standards and provide independent advice on the standards to the sector, government and internationally.

> **Enforcement** – using an evidence-based risk approach, the agency will evaluate institutions against the standards framework and act accordingly. Where necessary it will apply an escalating series of sanctions designed to initially assist an institution meet the minimum standards and gradually build towards prescriptive compliance.

There is a number of issues still to be resolved such as preserving the self-accrediting status of universities, the separation of standards making from standards application and the fact that Victoria and Western Australia have put forward a different model to the one proposed by the Australian Government.

In the drive towards a demand driven system of university admissions, there is a need to ensure that, as the process changes, all aspects of the quality of the education are upheld.

**RECOMMENDATION 15**

That the Victorian Government seeks to ensure that new quality arrangements (TEQSA) do not constrain the diversity of providers and the emergence of new collaborations.

**RECOMMENDATION 16**

That the Victorian Government supports the further development of an open higher education market including the flow of Commonwealth funding to non-Table A providers as envisaged by the Bradley Review.

### 5.5 RESOURCING

While some significant investments have been made to address under-funding, the Panel argues that, for a country seeking to be a knowledge-based economy, the Australian tertiary education sector is systematically under-funded. Victoria’s tertiary institutions are already under considerable financial pressure and this is inevitably going to increase given the tertiary education system will need to accommodate more students and a more diverse student population. But Commonwealth-supported places do not cover the full cost of provision, especially for institutions seeking globally competitive quality outcomes, and opportunities for individual institutions to re-dress the balance are curtailed by current policy commitments, which do not allow full fee-paying domestic students.

**RECOMMENDATION 17**

That the Victorian Government advocates that the Australian Government commits to funding levels that will at least sustain current quality levels and, as a minimum, accepts the proposal to supplement indexation recommended by Bradley.

**RECOMMENDATION 18**

That the Victorian Government advocates that the Australian Government undertakes modelling to assess more accurately funding requirements for the numbers of students the system will need to accommodate over the next fifteen years, based on the modelling on student numbers completed for the Panel.
5.6 COMPACT NEGOTIATIONS

The Panel considered a possible role for the Victorian Government in the ‘compact’ discussions the Australian Government has proposed with universities. According to the Australian Government’s Budget paper, it is intended that ‘mission-based compacts will facilitate alignment of institutional activity with national priorities’. The Panel is of the opinion, however, that it is equally important to align institutional activity at the ‘sub-national’ level to reflect regional and state needs and priorities.

There is a compelling case to support direct State involvement in compact discussions with the four Victorian multi-sector universities. These universities are among the largest providers in Victoria, enrolling some 84,000 TAFE students and 56,000 domestic higher education students. TAFE is not only fundamental to the missions of these unique institutions, TAFE activity is also an important element of their funding base. For several universities TAFE funding is roughly equivalent to direct funding from the Australian Government. Joint conduct of compact discussions in these multi-sector universities would be a useful step towards more integrated planning and reporting, reducing duplication and complexity; and, recognising the complementary nature of higher education and VET provision in these institutions.

Given the workforce development issues discussed earlier and the significant State contribution to university funding, the involvement of the Victorian Government in compact discussions applies to all Victorian universities.

**RECOMMENDATION 19**

That the Victorian Government should work with higher education institutions to ensure the needs of the State are considered in compact discussions with the Australian Government and in the development of the profiles of higher education institutions, and to ensure that, where appropriate, coordinated and consolidated bids are made.

5.7 MEETING INDUSTRY NEEDS

This fundamental aspect of a Tertiary Education Plan has a number of separate elements.

First is the need to continue to make broad assessments of supply and demand issues at national and state levels. Then, at a local level there are the specific needs of different urban and regional communities and the need for different professional and occupational skill sets. Not only does the matching of numbers of people educated and trained to industry demand matter, but even more critical is the quality and relevance of the education and training provided. A particular aspect considered by the Panel is work-integrated learning, often expressed in term of internships and cadetships in specific fields. Finally, there is the need to address and redress the balance between different levels of qualifications and skills, ranging from apprenticeships and traineeships to certificate courses, diplomas and bachelor and advanced degrees. These needs vary over time and place.
The Panel’s assessment is that current workplace development processes are weak in some areas and in the evolving demand driven environment, the availability of quality information is essential, for students and employers. This information needs continual updating and review as circumstances and priorities change.

The Australian Government’s policy paper, Transforming Australia’s Higher Education System (2009), noted that the current attainment rate for bachelor degrees for 25 to 34 year olds is around 32 per cent and under previous policy settings was likely to rise to around 34 per cent by 2025. This was deemed unlikely to meet Australia’s future economic needs.

Work undertaken for the Bradley Review by Access Economics projected a shortfall of 286,000 graduates over the ten-year period 2008-2018. For Victoria modelling suggests the shortfall would be around 72,000 graduates or 100,000 additional commencements. This amounts to about 10,000 commencements annually. A study of industry demand completed for the Victorian Government by the Centre for the Economics of Education and Training, had similar findings.

Education and work statistics released by the ABS in late November 2009, indicate that the proportion of 25 to 34 year olds with bachelor degrees increased markedly in 2009 from 31.9 per cent in 2008 to 34.6 per cent. This rise was mainly driven by migration, in a year in which Australia’s population growth topped 2 per cent (against a longer-term trend of 1.5 per cent). Two-thirds of that growth was fuelled by a record migrant intake of nearly 300,000.

This sort of statistical spike demonstrates that future needs cannot be predicted with any degree of certainty or accuracy – in aggregate let alone in specific occupations. However, it is possible to say – with absolute certainty – that the demand for high-level skills will continue to grow.

It is also important to consider industry demand in light of the projected qualifications profile for 2025. In 2007, a DIIRD publication Industry Demand for Higher Education Graduates in Victoria 2008 – 2022, stated that in order to meet Victoria’s workforce needs, there would need to be a significant expansion of the higher education system, especially in certain disciplines, to meet Victoria’s changing economic needs.

As discussed earlier, while Victoria continues to move away from its traditional manufacturing-based economy, newer industries that replace manufacturing will need a different set of skilled workers. The report advised that the main areas of critical importance are in science, engineering, IT and specific health-related occupations, including nursing specialities.

Not only will this require an increase in commencements, retention and completion of qualifications, but as the economy changes further, industry adopts new technologies and the demand for goods and services change over the next 15 years, industry will require a different mix of qualifications. Collaborations between industry and the higher education sector are critical to Victoria’s ability to meet the workforce needs, as will be the individual institution’s plans for expansion and their ability to attract students into fields of study where there is an apparent need.
RECOMMENDATION 20  That the Victorian Government works with Skills Australia and Industry Skills Councils to ensure that Victorian industry and tertiary education institutions have effective input into the development of a national network of workforce development advice for the tertiary sector.

RECOMMENDATION 21  That the Victorian Government further develops its own workforce needs, integrated planning and policy capacities in order to:

> inform its own planning decisions in relation to tertiary education and industry development
> provide direct advice to the Australian Government when necessary on priority skills needs for the Victorian labour force
> enhance the provision of industry and occupational level labour market information for students, prospective students and education providers.

RECOMMENDATION 22  That the Victorian Government facilitates the development and operation of industry sector networks between employers and tertiary education providers. The networks should provide labour market intelligence and specific proposals for action on skills shortages.

RECOMMENDATION 23  That the Victorian Government identifies key gaps and skills deficits in the next ten or fifteen years.
5.8 INTERNSHIPS AND CADETSHIPS

The Panel’s research led it to conclude that there is a number of valuable initiatives being undertaken through partnerships between industry, community, government and universities to develop internship and cadetship programs.

A National Internship Scheme

In 2008, Universities Australia published a position paper that put forward the idea of a National Internships Scheme as a means to address industry concerns over the work-readiness of graduates. The aim would be to build new and enhance existing partnerships between industry, community, university and government.

The scheme need not involve a large, new bureaucracy. Rather it should involve enhancement and extension of existing pathways for the work-readiness of Australia’s university students to support improved productivity, reduced skill shortages and enhanced equity and access to rewarding careers for Australia’s university graduates.42

In order to embed employability skills into the graduate skill set, partnerships were developed, which focussed on curriculum design, course content and delivery needs.

Universities Australia recommends that immediate steps to develop and implement a National Internships Scheme should include:

> A commitment by the Australian Government to take a more active role in promoting an expansion of internships and work integrated learning to address Australia’s skill shortages and to improve the linkages between university study and workforce readiness.

> A commitment by Australian and State and Territory Governments to lead by example by adopting a strategic approach to the expansion of internship opportunities within their own departments and agencies.

> Establishment of a joint steering committee, including representatives of the Australian, State and Territory Governments, national industry associations and the universities, to define the scope, structure, mechanisms and costs of a National Internship Scheme, including conduct of a detailed scoping study, and commissioning a pilot project. The latter initiative could be pursued as part of the COAG human capital agenda or as a separate initiative.

> A review by a new National Internships Council to provide advice to the Australian Government on regulatory and tax expenditure settings for work integrated learning. This should embrace the definition of courses for purposes of government funding eligibility within degree programs and should assess the tax deduction status of appropriate forms of payment for work experience.

RECOMMENDATION 24 That the Victorian Government considers the introduction of a scheme of public sector internships.

Rural Skills Cadetship Program

In recognition of the fact that tertiary students from regional Victoria who are studying away from home are more likely to return to regional Victoria if they remain connected during their studies, DIIRD – through Business Victoria – has introduced a Rural Skills Cadetship Program. The program provides grants for full-time tertiary students from regional Victoria to obtain paid semester-break employment in regional areas while studying. The program aims to help industry in regional Victoria to meet both short and long-term skills needs, by investing in potential future employees. It also provides students with the opportunity to develop practical experience in their field of study, maintain connections within provincial Victoria and obtain financial support while studying.43

The Panel is aware that cadetships – combining paid work, bursaries and work experience – were commonly available at one time through government agencies and public enterprises. Cadetships have now been largely phased out due to cost constraints, and as public sector enterprises have corporatised and privatised. Public sector enterprises no longer regard training for the industry or profession as a core responsibility. In the Panel’s view, these models have much to commend them as a means of attracting students in areas of skills shortages and/or strategic importance to the State. There is significant State and Australian Government support available for apprenticeships and traineeships in the VET sector in the form of employer incentives, payroll tax exemptions and other concessions and support for intermediary agencies to act as the legal employer through which students gain experience in a range of firms. The Panel sees no logical reason why these incentives should be made available in one sector but not another and for some occupations but not others. The Victorian Government could propose a joint higher education cadetship initiative with the Australian Government, perhaps on a pilot basis in key industries.

RECOMMENDATION 25 That the Victorian Government raise with the Australian Government the merits of introducing a cadetship scheme for regional students.

43 Grants of up to $2,500 are available to participating students toward their educational, travel and living costs. Host employers may be eligible for up to $1,250. The Rural Skills Cadetship Program is funded through the Provincial Victoria Growth Fund, which is part of the Victorian Government’s Moving Forward strategy to drive economic and population growth across provincial Victoria. www.business.vic.gov.au/BUSVE/GAP/PC_63163.html. According to a recent media release on behalf of the Minister for Skills and Workforce Participation, 71 cadets were accepted into the program in late 2008, and due to unprecedented demand, the Government accepted a further 92 cadet applications in a second round. www.premier.vic.gov.au/minister-for-skills-workforce-participation/cadetships-encouraging-young-workers-back-home.html
CHAPTER 06: EQUITY

6.1 VICTORIAN CONTEXT FOR LOW SES STUDENT POPULATION

Accompanying the Australian Government’s growth target of 40 per cent of 25-34 year olds attaining a bachelor degree by 2025, is a second significant target. This sets the goal to grow the proportion of undergraduate students enrolled in higher education from financially less advantaged backgrounds (the low SES quartile) from the present level of around 15 per cent to 20 per cent by 2020.

This is a far more challenging target for Victoria than it might at first appear. Experience over the last three or four decades shows that though huge efforts have been made (and some notable successes recorded for some individuals and some institutions) overall proportions have not changed. This is, no doubt, due in part to the general expansion of numbers over this time, bringing in more high (top 25 per cent) and middle (50 per cent) SES students.

A similar story has unfolded elsewhere. The British ‘Aimhigher’ initiative, introduced in 2001, clearly illustrates the enormity of the task before us. Aimhigher has similarities to some equity programs recently introduced in Australia and was intended to increase the number of school students from disadvantaged backgrounds aspiring to enter higher education.44 An early evaluation in 2005 found no evidence that the program raised the attainment of young people in the equivalent of the VCE from the most disadvantaged backgrounds. The program did, however, make a modest, yet significant difference of 1 or 2 per cent to the proportion of school students with average year 11 attainment from economically disadvantaged backgrounds proceeding to higher education.45 Victoria must learn from examples such as this. The goal is not simply to enrol more students from under-represented groups into university. The emphasis must be on the adequate preparation of potential students for higher education and on adequate support throughout their studies. Victoria must ensure that more students from under-represented groups actually complete their degrees.

The Panel has concluded that the 20 per cent low SES goal will be particularly challenging for Victoria because – using the postcode methodology which identifies low SES population across Australia – only 19.8 per cent of Victoria’s population falls into this category rather than 25 per cent found elsewhere in Australia [2007 figures]. And, while in Australia overall, 15.4 per cent of undergraduate students enrolled in higher education were from low SES backgrounds in 2007, in Victoria the comparable proportion was only 13 per cent.

44 The British Government funded higher education institutions and schools to introduce activities for pupils in years 9 to 11 such as summer schools, residential courses, day visits to universities, mentoring by undergraduates and higher education staff, master classes, student ambassadors and study support activities such as homework clubs. www. aimhigher.ac.uk/sites/ practitioner/home/index. cfm

Methodology for calculating socioeconomic status

The Australian higher education sector currently infers a student’s SES from the postcode of their permanent address; this approach is based upon the assumption that location is the best signifier of the likelihood of educational disadvantage/advantage. The postcode index is particularly problematic in socially heterogeneous areas where it is unlikely that access to higher education is randomly distributed. It is likely that the postcode index underestimates the under-representation of low SES people, because it is quite likely that there are high SES people (with high incomes and high education levels) living in postcodes designated as low SES. Those high SES people have higher rates of access to higher education than the low SES people living in the same postcode district. Parental educational and occupation levels are both superior indicators of individual SES compared to postcode of home address.

In Australia and internationally, parental educational and occupation levels have been shown to be predictors of achievement at school, school retention and completion and educational aspirations.

Analyses of the 2006 Student Finances dataset reveal that parental education levels – in particular the father’s education – produces more substantial differences in students’ financial circumstances and effects on students’ capacity to study. In comparison, parental occupational levels reveal marginally fewer and smaller differences and postcodes fewer differences again.

The Australian Government has recently announced that it will commission work on the measurement of the SES of students in higher education with a view to moving from the current postcode methodology to one based on the individual circumstances of each student. Such a change is seen as likely to lead to enhanced understanding of the relationships between SES, regionality and participation in higher education. The Panel applauds the Commonwealth Government’s move to improve the methodology used to calculate socioeconomic status.

RECOMMENDATION 26 That Victoria endorses the challenging Australian Government ambition of raising the proportion of people in the lowest SES quartile participating in undergraduate higher education to 20 per cent by 2020, based upon the demographics of the Victorian population.

As was noted in Chapter 3, the setting of specific targets, as the Australian Government has done in responding to the Bradley Review, highlights a particular cohort. Our attention needs to be on overall development as well. The 40 per cent target was confined to a particular age cohort and to one qualification. Similarly the 20 per cent low SES target focuses attention on just one of six equity groups. In the Panel’s opinion, Victoria should
be seeking improvement in accordance with the principle of ‘changing the balance of the student population to reflect more closely the composition of society as a whole’. The six equity groups referred to here were originally identified in 1990 in a landmark Australian Government paper, *A Fair Chance for All*, and they comprise ‘people with disabilities, Aboriginal and Torres Strait Islander people, women, people from non-English speaking backgrounds, people from low-income families and people from rural and isolated areas’.

While progress has been made to differing extents and in different ways with some of these groups, the high priority for this report is two groups in particular – those from low SES backgrounds (dealt with in this chapter) and those living in regional areas (to be dealt with in the next).

The endorsement of the two national targets by the Australian Government has been accompanied by commitments in its 2009-10 Budget, which were spelled out in *Transforming Australia’s Higher Education System*. In it, the Government commits to funding growth, with additional per capita funding beginning in 2012-13. The introduction of funding will be driven by student choice and demand rather than by government allocation of places by course and institution. There will be additional funding support for enrolling low SES students, as well as for related partnership activities.

The Panel is aware that there is presently a willingness among Victorian universities to plan for growth and believes that it is important that action is taken with some speed and urgency to build upon the momentum that has been generated.

Figure 3 below shows metropolitan Melbourne, by State Government regions and Local Government Area boundaries, SEIFA index of relative socio-economic disadvantage, 2006.

**FIGURE 3** METROPOLITAN MELBOURNE, SHOWING STATE GOVERNMENT REGION AND LGA BOUNDARIES, SEIFA INDEX OF RELATIVE SOCIO-ECONOMIC DISADVANTAGE, 2006

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The dimensions of low SES under-representation are provided in the following set of tables.
Table 5 shows the share of undergraduate enrolments by SES in Australia. It shows that 15.4 per cent of undergraduate domestic students enrolling in Australian universities had a home postcode in a low SES area.

**TABLE 5: SOCIOECONOMIC STATUS OF DOMESTIC UNDERGRADUATE ENROLES IN AUSTRALIAN HIGHER EDUCATION INSTITUTIONS, 2007.**

<table>
<thead>
<tr>
<th>Undergraduate enrolments</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>Per cent share</td>
<td></td>
</tr>
<tr>
<td>Low SES</td>
<td>84,671</td>
<td>15.4</td>
</tr>
<tr>
<td>Middle SES</td>
<td>256,892</td>
<td>46.7</td>
</tr>
<tr>
<td>High SES</td>
<td>209,015</td>
<td>38.0</td>
</tr>
<tr>
<td>Total</td>
<td>550,578</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Table 6 shows the share of low SES undergraduate students for Victorian higher education providers. The figure of 13 per cent for low SES undergraduates is notably lower than the national figure. As noted above, the key reason why the Victorian level is lower than the national level relates to the fact that when SES is calculated for the whole of Australia, Victoria has a smaller share of the overall national low SES population.

**TABLE 6: SOCIOECONOMIC STATUS OF DOMESTIC UNDERGRADUATE ENROLES IN VICTORIAN HIGHER EDUCATION INSTITUTIONS, 2007, AND OVERALL SES SHARE AMONG THE VICTORIAN AND AUSTRALIAN POPULATIONS, 2006.**

<table>
<thead>
<tr>
<th>Victorian university enrolments*</th>
<th>Victorian population</th>
<th>Australian population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>Per cent share</td>
<td>Per cent share</td>
</tr>
<tr>
<td>Low SES</td>
<td>16,982</td>
<td>13.0</td>
</tr>
<tr>
<td>Middle SES</td>
<td>57,877</td>
<td>44.2</td>
</tr>
<tr>
<td>High SES</td>
<td>56,231</td>
<td>42.9</td>
</tr>
<tr>
<td>Total</td>
<td>131,090</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*THE VICTORIAN TOTAL FIGURE INCLUDES VICTORIAN-BASED ACU CAMPUSES

Table 7 shows the distribution of university undergraduate enrolments by SES for each of the universities based in Victoria. It helps to highlight the variation between institutions on the SES measure.47

**TABLE 7: SOCIOECONOMIC STATUS OF UNDERGRADUATE DOMESTIC ENROLEES IN VICTORIAN HIGHER EDUCATION INSTITUTIONS, BY INSTITUTION, 2007.**

<table>
<thead>
<tr>
<th>Number of enrolments</th>
<th>Share of enrolments by SES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low SES</td>
</tr>
<tr>
<td>University of Ballarat</td>
<td>710</td>
</tr>
<tr>
<td>Swinburne University</td>
<td>799</td>
</tr>
<tr>
<td>Victoria University</td>
<td>2,433</td>
</tr>
<tr>
<td>La Trobe University</td>
<td>3,120</td>
</tr>
<tr>
<td>Deakin University</td>
<td>2,330</td>
</tr>
<tr>
<td>RMIT</td>
<td>2,136</td>
</tr>
<tr>
<td>Monash University</td>
<td>3,200</td>
</tr>
<tr>
<td>The University of Melbourne</td>
<td>1,570</td>
</tr>
<tr>
<td>Australian Catholic University</td>
<td>345</td>
</tr>
<tr>
<td>Other providers</td>
<td>339</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16,982</strong></td>
</tr>
</tbody>
</table>

*ACU FIGURES ARE FOR THE VICTORIAN-BASED CAMPUSES OF THIS MULTI-SITE INSTITUTION ONLY.

**SOURCE:** DEEWR HIGHER EDUCATION STATISTICS COLLECTION, 2007 AND ABS SEIFA 2006.

To address the variability in participation among under-represented groups, arising both from low SES and geographical differences in participation in outer urban and regional Victoria, a number of specific key elements are next considered in turn.

Broadly speaking, low university enrolments can be traced to non-completion of secondary school and the host of [related] reasons behind that:

- non-continuation in full time education for those that do not complete year 12
- enrolment in other institutions such as TAFE
- disengagement – where students who initially enrol depart before completing their course48

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Figure 4 shows the destinations of students completing year 12 or equivalent in 2007 across 14 ABS Labour Force Regions in Victoria. In most metropolitan areas there is reasonably high overall transition to tertiary education. In contrast, non-metropolitan regions and the Mornington Peninsula saw relatively low levels of transition to tertiary education. In these regions there was higher take-up of apprenticeships and traineeships, as well as higher proportions in employment and looking for work.

Care is needed in using and interpreting the data displayed in Figure 4. It shows, for example, that the Outer Western metropolitan ABS labour force region has a university participation rate of 47.9 per cent of year 12 or equivalent completers. Intuitively, this seems high. But the Outer Western Metropolitan Statistical Region is defined to include the local government city councils of Maribyrnong (includes Footscray), Hobsons Bay and Moonee Valley as well as the councils of Brimbank, Melton and Wyndham. A second example of note is that South Eastern comprises Cardinia, Casey and Greater Dandenong but not Bayside or Glen Eira, which are separately defined (along with Kingston and Stonnington) as Southern.
The Panel supports young people in making choices in their best interests and according to their own preferences. Some students will prefer to move directly to employment after schooling, while others will choose an option within the VET sector. Depending on the student’s circumstances, the employment opportunities in their locality and a range of other factors, some students who are potentially capable of completing a university course may sensibly make a different choice. Much effort needs to be made, however, to ensure that young people are well informed and that their own aspirations – formed as they are within a family context – become of over-riding importance.

Significant effort is also required to ensure that actual and perceived barriers to participation in higher education are removed and/or appropriate solutions provided. For low SES students especially, the perceived financial costs associated with studying at university may be seen as a ‘major deterrent’. Similarly, regional students find university fees, the cost of accommodation and travel, and their families’ capacity to support them while living and studying away from home, of considerable concern.

Some commentators have argued, however, that it would be ‘a serious over-simplification to assume that imbalances in the higher education of regional people are primarily due to distance from a university and the costs associated with relocation’. Instead, it is their ‘personal socioeconomic circumstances and individual community context’ that clearly influence regional and low SES students’ decisions. The student’s SES is likely to be connected to their experience of what have been referred to as ‘encouraging factors’. Low SES students are less likely to experience encouraging factors, while higher SES students are more likely to benefit from ‘a greater likelihood of believing that university will result in desirable career outcomes and from stronger perceptions of parental and teacher encouragement’.

6.2 INDIGENOUS PARTICIPATION

Indigenous Australians are the group most under-represented in higher education. The rate of completion of year 12 schooling is significantly lower for Indigenous students than for their non-Indigenous peers. If they do complete year 12, they are also more likely to choose non-higher education pathways or to be prevented from entering higher education because of academic or other challenges.

At the time of the 2006 census, there were around 33,000 Indigenous people living in Victoria and they were more likely to come from a low SES background. The largest regional Indigenous populations were in Bairnsdale (11,004 or 4.8 per cent), Mooroopna (7,018 or 7.1 per cent), Robinvale (2,280 persons or 13.7 per cent) and Orbost (2,050 or 6.4 per cent).

Despite the Indigenous population constituting 2.4 per cent of the Australian population, Indigenous students only accounted for 1.25 per cent of the commencing domestic student population in 2006. This participation share has remained constant during the period 2001-06, despite the fact that during the same period there were at least three factors that might have increased the rate of access: there was an increase in the Indigenous population overall; there was an increase in secondary education participation among young Indigenous people; and there is a higher proportion of young people in the Indigenous population than in the non-Indigenous population.

Indigenous Australians are the most under-represented group in higher education. The rate of school retention from years 10 to 12 is significantly lower for Indigenous students than for non-Indigenous students. If Indigenous students complete year 12 they are more likely than their non-Indigenous counterparts to pursue a non-higher education pathway or to be prevented from entering higher education due to academic or other challenges. The key challenges for Indigenous students are low academic achievement, lower aspirations for higher education and lack of information about higher education opportunities.
Statistics show that participation in higher education by Indigenous students throughout Australia is highly gender-biased. In 2007, only 34.7 per cent of Indigenous students in Victoria (and 33.8 per cent nationally) were males, despite them constituting nearly half (48.9 per cent) of the total Victorian Indigenous population. According to a recent paper by Joe Lane at the Centre for Independent Studies, Indigenous men are rarely able to follow their fathers into trades, farming or businesses; boys tend to drop out of secondary school at higher rates than girls and, in welfare-dependent populations, the situation is even worse with very few boys completing year 10. Careers that are popular with Indigenous female students (such as teaching or nursing) are regarded as ‘female preserves’, and, because ‘more women than men go to university or TAFE, some Indigenous men tend to view these institutions as places for women’.56 Indigenous students also tend to have a different age profile compared to their non-Indigenous peers. In 2006, the average age of a commencing Indigenous undergraduate in Australia was 29, compared to 22 for other students.57

During 2007, DEECD conducted an extensive review of education provision for Indigenous students which resulted in the new major education strategy known as Wannik. The strategy aims to improve outcomes for Koorie students across the whole of the government school system by creating a culture of high expectations and individualised learning; introducing explicit accountability mechanisms for improved outcomes across all levels of the school system; and creating an environment that respects, recognises and celebrates cultural identity through practice and curriculum. The strategy will involve intensive literacy and numeracy programs for low-achieving students; support and incentives for top students; the development of leadership opportunities for Koorie students in secondary schools; and the celebration of Koorie culture and identity in all schools for all students. Within the government school system, school leaders and teachers will receive substantial professional support and development to lead reform and the Koorie support workforce will be reformed and expanded. The strategy includes funding that allows schools and regions to be innovative and responsive to local needs, and to implement proven strategies.58

At post-school level, the Victorian Aboriginal Education Association Incorporated (VAEAI) works through Local Aboriginal Education Consultative Groups (LAECGs) who annually participate in developing Regional Training Plans which inform the Koorie State Training Plan. The most recent Plan for 2010 shapes the future direction of vocational education and training for Koorie people in Victoria.59

In developing the Tertiary Education Plan for Victoria, the Panel sees it as important that a component of the Plan explicitly addresses Koorie participation and attainment in universities as well as in VET. In the future, the VAEAI sponsored planning documents should be comprehensive and so include higher education.

6.3 BUILDING ASPIRATION

Aspiration for university participation is directly linked to an individual’s experience of encouraging factors, as mentioned above. Some young people are endowed, through family and community networks, with the cultural knowledge and discourses that enable them to imagine themselves as potential university students. Others may not experience these sorts of encouraging factors and may become ‘marginalised’ through discourses that devalue education and its benefits generally.60 Researchers interviewing students from poor backgrounds in the US, whose highest aspirations were year 10 or 12, found that none knew anyone who had been to college or had parents who had been to college; a group of parents who were asked about their children’s college aspirations responded as though they had been asked ‘whether their kids would visit Mars this month’.61 Similarly, one leader of an outer metropolitan campus observed that in the surrounding area:
We actually find that there is little parental support for students going to tertiary education. Our recruitment people say that parents are often proactively saying, ‘Why would you want to do that? I am all right and I haven’t got those qualifications’.

The role of parents in guiding and supporting their children’s aspirations and post-school options is obviously crucial. Parents therefore have a critical need for up-to-date information about contemporary career choices, education options and the costs and benefits of these options. There is a range of ways schools can involve parents in career education. One such model is the Parents as Career Transition Support (PACTS) program, which gives parents the chance to participate in a series of workshops. There are, however, certain barriers to engaging parents: some schools are reluctant to offer the program because it does not contribute directly to students’ ENTERs; sometimes career teachers are ‘too busy’; or, in some cases, it is hard to get active support from parents. These constraints need to be overcome: it is vital that parental understanding of and support for higher education is increased and that they are fully informed about the long-term benefits of higher education and all the options that are available to their children.

Those who have experienced a smooth transition to higher education often report having come into contact with someone, such as a mentor, who had ‘touched or changed’ their lives at a critical time. Sometimes the mentor is a relative and sometimes someone who is paid to offer expert advice. In either case, it is apparently the human contact that makes the difference. Also crucial is the timing of the intervention. Students from low SES and/or regional backgrounds need to be reached before they’ve made plans that preclude higher education.

While it is, of course, important not to suggest that higher education is the right path for everyone, the Panel believe that enabling young people to imagine themselves as future graduates or diploma-holders, and giving them the chance to make informed choices about post-school destinations, is vital. Certainly, the Panel believes that, especially for under-represented groups, information about all the practical aspects of embarking on further education – including financial issues such as income support and finding part-time work and accommodation – alongside information about appropriate course and university selection, selection procedures and applying for scholarships – is extremely important. This information could perhaps be provided at structured and engaging higher education orientation days aimed at students in year 10 and above – and their parents. Younger students and their parents might also benefit from an introduction to these concepts.

**RECOMMENDATION 27**
That, in order to widen participation in higher education from young people in under-represented groups, the Victorian Government establishes a significantly enhanced coordinated and integrated approach to raise their aspirations and attainment levels. Considerations in the approach should include information about: income support; employment; course selection; selection procedures; the availability of scholarship programs; and Indigenous education strategies.
6.4 ASSISTING STUDENTS TO SET ACHIEVABLE GOALS

A study showed that among school students in the west of Melbourne there is no lack of formal aspiration for tertiary education, but when faced with the realities of school achievement and the requirements for study, many pursue lower level outcomes. The gap between students’ aspirations and the choices they ultimately make is larger for those from low SES backgrounds and intensified for many who are also from culturally and linguistically diverse backgrounds. Students with these backgrounds are less confident that they will be able to achieve their goals. This particular study suggests that the challenge is not to raise aspirations per se, but to assist students to set goals which they are then able to achieve. To increase the potential for students to do this effectively they and their families need to understand:

- the importance of achieving a VET or higher education qualification
- the breadth and diversity of current VET and higher education options and pathways
- the various approaches to teaching and study
- how the VCE and VCAL are structured and how tertiary education institutions select students with the potential to move between vocational and higher education as their capabilities and potential develop
- basic practical information about charges and living costs and how these might be met by students.

The depth and complexity of the information provided needs to reflect the capacity of students in the target year groups to understand it.67
6.5 SCHOOL COMPLETION AND ACHIEVEMENT

There is a clear disparity between school attainment in metropolitan Melbourne and regional Victoria, as Figure 5 below shows.

**FIGURE 5: DISTRIBUTION OF 2008 ENTERS IN VARIOUS BANDS IN METROPOLITAN AND REGIONAL VICTORIA.**

<table>
<thead>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-metropolitan</td>
<td>Wimmera</td>
<td>Western District</td>
<td>Ovens-Murray</td>
<td>Mallee</td>
<td>Loddon</td>
<td>Goulburn</td>
<td>Gippsland</td>
</tr>
</tbody>
</table>

**SOURCE:** ADAPTED BY SKILLS VICTORIA FROM VTAC DATA ON THE DISTRIBUTION OF 2008 ENTERS BY METROPOLITAN SUBURB AND REGION DEFINED IN TERMS OF HOME POSTCODE.

Achievement at school and completing year 12 are far more important than cost considerations when young people are forming ideas about their post-school destinations.

Cost is an issue, of course, for some people, but cost comes in as a consideration once people have got to the point of transition – once they have got close to the point of considering university as an option. But many of the under-represented groups ... have already left school by year 10 or year 11. University has not been on the horizon for a long time.

Until school achievement is raised, university aspirations will continue to be low in regional and low socioeconomic status areas.
6.6 CAREER EDUCATION

Throughout its recent inquiry, the Parliamentary Education and Training Committee received a great deal of evidence about career education in Victorian schools. It heard much that was laudable, but also that there are some areas that require significant improvement.71 Similarly, a review of the Managed Individual Pathways (MIPs) program72 found that there was strong support for the program, but variation in its implementation and effectiveness.73

The intervention of a career teacher can enhance a student’s social network, provide encouraging factors, and lead to increased aspirations for higher education. Careers educators in particular, therefore, require specialised skills and knowledge about, for example, pathways to, and between, higher education and TAFE studies; specific courses at particular institutions; career outcomes; ENTER and other requirements for courses; foundation and bridging courses; scholarships; financial support including youth allowance; practical issues around moving away from home; deferral processes; and, special entry schemes. Nevertheless, it is important to be realistic and understand that any individual career teacher is unlikely to be able to provide an exhaustive range of options and information to every single student in their school. It is incumbent upon each student to be proactive in seeking and pursuing their educational goals.

Career teachers also need to have sufficient time and resources to allow for individualised support. The MIPS program is achieving some success in relation to individualised support in pathways planning, but implementation of the program depends very much on schools allocating sufficient time and resources for individual face-to-face discussion. The vital importance of the role of career educators was emphasised time and again by stakeholders who spoke to Panel members at the various institutions they visited and the roundtables they attended.

The Panel believes that the role of career educators is vital to improving rates of participation and that the quality of career education in Victorian schools should be improved and enhanced.

6.7 OUTREACH PROGRAMS

Many Victorian universities undertake outreach activities. Outreach is typically aimed at populations under-represented in higher education and is motivated by a desire to improve access and equity. Programs also aim to de-mystify higher education, promote awareness of university life, motivate students and lift students’ achievements and aspirations. Victorian programs include the University of Ballarat’s Regional Schools Outreach Program; Deakin University’s Regional Engagement Access Program and Metropolitan Access Program; Schools Access Monash; and Access and Success at Victoria University. Some outreach schemes can result in significant improvements in student participation from target equity groups whereas others, despite not inconsiderable investment, appear to produce very little change.74

71 Parliamentary Education and Training Committee, 2009, p. 79.
72 The MIPS program, introduced in 2001, aims to provide individual assistance to senior secondary students in Victoria. MIPS is intended to help students manage their post-school transitions, and develop the skills and knowledge to navigate careers pathways throughout life. All students 15 years-old and above in government schools are provided with an individual pathway plan and associated support, including individualised discussion of their career aspirations and the study required to reach them. Additional support is provided to students considered at risk of disengaging from school or not making a successful transition. Students participating in youth pathways programs in TAFEs or Adult and Community Education institutions also have pathway plans. Parliamentary Education and Training Committee, 2009, p. 83. Further information from the Department of Education and Early Childhood Development website: www.education.vic.gov.au/sensecyouth/careertrans/mips/default.htm.
Many of the strategies employed in outreach so far have concentrated on addressing the barriers to higher education – but, as mentioned earlier, without a great deal of impact on people from designated equity groups. Newly emerging models of outreach are beginning to focus on identifying enabling factors, in particular, those which create aspiration to attend university. Recent research supports the notion that decisions about attending university are made early in life and for many students this is often before year 8. Outreach programs targeting years 10 and above may not therefore make significant differences to students’ choices.\textsuperscript{75} Professor Gavin Brown has argued strongly for early intervention:

\begin{quote}
\textit{...early intervention is necessary. This starts with preschool opportunities and runs right through the education system. Universities can and should help with this, but mere tinkering with entry requirements is fool’s gold.}\textsuperscript{76}
\end{quote}

Some universities have recently begun to extend their outreach activities to incorporate primary school students. The Monash Discovery Club, for example, works with the principals of local primary schools in the Gippsland area to give grade 5 and 6 pupils a chance to ‘discover’ university. Similarly, the University of Ballarat Regional School Outreach Program is introducing a pilot program with students in grades 4 to 6 at Cape Clear Primary School which is aimed at encouraging students’ aspirations.\textsuperscript{77} Initiatives such as these are very recent and their impact has yet to be evaluated in terms of an improvement in enrolment statistics.\textsuperscript{78}

**Kinda Kinder**

The Kinda Kinder program, being run by Victoria University, began in 2005 and is proving to be very successful as well as having innovative outcomes for caregivers. Kinda Kinder is a literacy-focused, play-based learning environment for children aged from birth to 4 years. The children attend once a week with a parent or a caregiver for a one hour free program. Kinda Kinder began as an innovative partnership between Victoria University, the Shire of Melton and Sydenham-Hillside Primary School. The program was initially developed to meet the needs of preschool children and their families from disadvantaged circumstances. Many children were missing out on a pre-school experience and the opportunity to engage in an informal learning environment. This lack of experience, for some children, made the transition to formal education difficult. The program is run by first and second year pre-service teachers from the University’s Bachelor of Education (Early Childhood/Primary Education) program. From its beginnings in 2005, the Kinda Kinder program has expanded and in 2009 operates at 19 sites (including 3 libraries) across the western region of Melbourne. Kinda Kinder has also enabled disengaged carers to re-engage with education. A new generation of adult learners including parents and grandparents are learning along with the children, the pre-service teachers and university staff in the Kinda Kinder setting.\textsuperscript{79}


76 Cited by Stewart, 2008, p. 5.


78 Stewart, 2008, p. 4.

79 Information kindly provided by Catherine Hamm, Course Coordinator, Bachelor of Education (Early Childhood/Primary), Victoria University.
DEECD Transitions Programs

Research shows that greater parental involvement in education encourages more positive attitudes towards school, improves homework habits, reduces absenteeism and dropout, and enhances academic achievement by maximising the involvement of families in their child’s learning and enhancing both the school and home as learning environments.

Initiatives developed by DEECD are aimed at building the capacity of schools to develop strategies that will better engage families to be more involved in learning.

One pilot example is the Extended School Hub: schools develop strategic partnerships with business and the community to address barriers to students achieving their educational potential.

VET in Schools (VETis)

VET in Schools (VETis) programs are designed to expand opportunities and pathways for senior secondary students and improve post compulsory educational outcomes.

Learning and Teaching Careers Resources

Developed for Victorian schools, these career and transition resources include lessons for students from Year 6 to Year 10, but can be tailored to suit other age groups. Lessons are included under the headings:

- Self awareness – assisting young people to identify personal attributes, abilities, interests and values.
- Opportunity awareness – for young people to investigate, explore and experience the world of work and the pathways in it.
- Decision learning – assisting young people in developing the skills needed to make informed decisions particularly in relation to career development.
- Transition planning – to develop awareness of the skills required to deal with and get the best outcomes in new situations, particularly in relation to transitions through education, training and work.

The Panel is strongly supportive of early childhood outreach and transitions programs like these and applauds and encourages the efforts of the institutions and schools involved.

RECOMMENDATION 28 That the Victorian Government investigates extending early childhood outreach programs to enable a greater number of low SES children and parents to participate.
6.8 ACADEMIC SUPPORT PROGRAMS

In addition to outreach intended to de-mystify university and encourage young people to imagine themselves as graduates, there are outreach programs focusing on student achievement. In Victoria, however, these often seem to be directed at high-achieving students.

As part of its inquiry, the Parliamentary Education and Training Committee met with the Canada Millennium Scholarship Foundation in Montreal and were told about the Advancement Via Individual Determination (AVID) program. This five-year in-school academic support program involves 1,200 students in years 5 to 12 across 20 schools. It is directed primarily at average students and aims to prepare them for post-secondary studies through placement in advanced post-secondary preparatory classes, which provide the skills required for university-style learning. Program participants are supported by specially trained teachers and tutors as well as an interdisciplinary school site team.

The Committee came to the conclusion that such programs could be valuable in Victoria, especially in building the confidence and skills of middle achieving students who may be on the threshold of developing aspirations toward higher education.80 The Panel is also very interested in the potential of this sort of program and considers the concept worthy of further investigation.

6.9 THE COST OF HIGHER EDUCATION FOR STUDENTS AND THEIR FAMILIES

The cost of participating in higher education in Australia is relatively high. The OECD estimates that Australia ranks 23rd out of 31 OECD countries in terms of students' ability to finance their education costs, as measured by the ratio of tuition and living costs to available individual funding.81 Not surprisingly, for many young people considering their post-school choices, meeting these costs is an overriding concern. While the cost of travel and ongoing living costs impact on all students, those from regional areas (and those metropolitan students who choose to live away from home) bear the additional burden of costs relating to relocation. While tuition fees may be deferred under HECS, it is estimated that living costs and study costs over the duration of a typical three-year undergraduate degree course amount to nearly $30,000 for a student living at home, $66,000 for a student living in shared rental accommodation, and over $85,000 for a student living on campus.82

For many young people the cost of forgone income is also of concern. The uncertain and delayed economic benefits of higher education, combined with the upfront costs of study, living and travel, and the levels of debt associated with HECS, can compare unfavourably to the more immediate benefits of work and apprenticeship opportunities.83 There is evidence that low SES students may be especially debt averse and consider the concept of incurring debt before entering employment, particularly unacceptable.84

The Panel presumes that from 2012, with the introduction of a student demand driven system, the need for intensive efforts to explain the many benefits of higher education to under-represented groups will become clear. The Panel has also considered whether a three-semester year might appeal to debt-averse students, enabling them to complete a three-year degree in two years or a six-year double degree program in three or three and a half years – an option that is currently available at Bond and Deakin universities.85
6.10 YOUTH ALLOWANCE

University students draw on various income sources in order to finance their studies. These include a range of government income support programs, including the Youth Allowance. Following the Bradley Review, announcements were made by the Australian Government relating to changes in the eligibility criteria for establishing independence under the Youth Allowance. This will include tightening the workforce participation criteria. Rather than the previous arrangement whereby young people had to earn $19,532 (2009 figure) in 18 months to qualify as eligible for the independent rate of Youth Allowance, it was proposed that in the future only those young people who have worked for an average of 30 hours per week for 18 months will be eligible. The proposed changes to the workforce participation criteria created controversy and led to the Senate’s rejection of the legislation. The Australian Government has indicated that it intends to bring the relevant legislation back to the Parliament early in 2010.

A number of commentators have expressed concern about the proposed changes to the workforce participation criteria and have described its potential adverse effect on young people in rural and regional areas. The Panel was similarly made aware, through consultations, that many students and parents, particularly in regional Victoria, were very worried about the impact of the proposed changes to the workforce participation criteria. The Panel believes that Youth Allowance arrangements have not been adequately communicated to potential students and their parents and that students need to be fully informed of their options in relation to income support and benefits. It is also vital, as far as the Panel is concerned, that students are made aware of the range of pathways and options available as more and more higher education courses become available at the network of TAFEs located across regional areas.

RECOMMENDATION 29 That the Victorian Government works with the Australian Government to ensure that income support arrangements are adequate and effective.

6.11 PAID EMPLOYMENT

Australian students have the highest workforce participation rates of any comparable country. In 2006, 85.1 per cent of full-time undergraduate students were undertaking paid work at some point during the year, an increase from 78.1 per cent in 2000. While these students worked an average of 14.8 hours per week, one in six was working more than 20 hours per week during semester.

Research suggests that excessive hours of work are detrimental to students’ academic performance, reducing time for study and causing some to miss classes. Approximately 40 per cent of full-time undergraduates in paid employment reported that work was adversely affecting their academic performance and 22.7 per cent reported regularly missing classes due to work commitments. Working more than ten hours per week was associated with higher attrition rates.86

Apart from the financial benefits, there are positive outcomes to students’ part-time employment including improved self-esteem and the development of a range of workplace skills. Some universities are taking steps to help students access the benefits of work, while reducing its impact on their studies. Monash University’s co-op program at the Gippsland campus gives students the opportunity to earn $17,000 over three years participating in industry placements in an area relevant to their studies.87

87. Ibid, p.185.
6.12 STUDENT ACCOMMODATION

There is a significant shortage of affordable housing available for tertiary students in Victoria. Data from the Department of Human Services (March 2009), reveals that there are approximately 18,451 bedrooms available state-wide in the ‘affordable rental’ segment of the market. Some 70,000 overseas university students (out of 162,000) compete with low income Victorians for housing in the affordable rental sector. This excludes the 20,000 or so regional students and the 60,000 or so TAFE students who face similar issues.

6.13 PREPAREDNESS FOR TERTIARY EDUCATION

Lawrence (2003) argues that, with the increasing diversity of the student population, the lack of cultural familiarity with university culture will exacerbate problems associated with the first year experience and consequently the perseverance and success of currently under-represented groups. Universities have cultural values, discourses and norms to which new students must adjust and how their lack of familiarity with these is handled in the university context by academic and support staff is pivotal to their chances of graduating. Students may be poorly prepared to gain simultaneously and rapidly the relevant technical, communication, interpersonal and self-presentation skills necessary for success. They have to adjust not only to the environment, teaching and learning styles, life, procedures, practices and disciplines in the university, they also have to do so in a relatively short period of time.\(^{88}\) Transition programs and foundation courses address these issues, but such programs are generally much better attended by students from high socio-economic backgrounds looking to optimise their performance than students who are the ‘first in their family’ to attend university.\(^{89}\)

The Panel believes that adequate preparation for all aspects of life as a university undergraduate is vital to the successful completion of students from previously under-represented groups. In addition, the Panel believes that it is important that university teaching and support staff receive adequate training so that they are able to identify the specific literacies and discourses that students need to master in order to pass each course of study and the methods by which these can be made explicit.

The Panel has come to the conclusion that adequate preparation of students for tertiary education is the key to increasing participation by under-represented groups within the Victorian population. In a system that offers universal entitlement, it will be applicants’ preparedness for university-style learning that becomes ultimately significant rather than their academic ranking relative to other applicants. Emphasis on the ENTER system will become critical only for some high demand courses and institutions.

6.14 SHOULD UNIVERSITIES INTERVENE IN THE EDUCATION PROVIDED TO STUDENTS IN SCHOOLS?

This is a challenging question. There are two major strands to the argument for intervention:

- Clearly it is not only schools that create educational outcomes. In higher achieving areas, individuals are influenced by their families and other social supports as well as their schools. As already mentioned, universities can provide support and assistance that compensates for lack of non-school support.

- Universities have expertise in teaching and subject areas as well as resources and materials that can enhance educational outcomes. Current students are also potentially able to provide educational and mentoring support.
There is a number of examples. Victoria University’s Access and Success program assists schools in the west of Melbourne to improve educational outcomes through support for teachers and schools, addressing priority areas identified by schools.

La Trobe and Melbourne universities jointly support a science in schools program which addresses a major area of weak outcomes for students from low SES and other disadvantaged backgrounds by providing university student mentors to work with students in years 7-10. RMIT’s Braintrust program works with primary and secondary schools toward similar goals.

One recent report argues that there is enormous potential for tertiary education providers to support schools and students improve learning outcomes – but to reach this would be well beyond the capacity of the institutions involved, even with substantial funding from the Australian Government’s fund for outreach activities. There is a need to identify the major learning weaknesses of the target areas and the specific schools within them to determine priorities – the current involvement in support for science is a prime example.

Related to this is the idea of universities operating as providers of VCE and VCAL studies, like TAFE institutes and ACFE providers. The primary target is those people for whom the traditional school path was not suitable, who for one reason or another have sought to leave school early. Typically the needs of this group are likely to focus on foundation literacy and numeracy and enhancing their capacity for learning to enable enrolment in tertiary education.

All universities currently provide enabling foundation or bridging courses to assist students without the necessary skill levels for first-year study. But these courses are unlikely to be suitable for those who did not complete year 12. RMIT, however, offers both VCE and VCAL programs to more than 500 students on its city campus.90

VU College

Victoria University established VU College to raise the profile of its provision of foundation courses to people at the margins of the education system. The College also provides VCE and VCAL programs. One of the University’s aims was to increase the levels of transition to higher level VET and higher education courses.

Community Gateways

Victoria University’s Community Gateways initiative is intended to provide a better point of access to information about tertiary education and training and foundation level courses for people in the west. Promotion of options will take place through portable Gateways in shopping centres and council facilities; using a large caravan; and permanent sites in libraries, school, and community centres. The use of outlets other than the main university sites has been concentrated in provincial regions with the aim of making access as easy as possible.91 This type of initiative might usefully attract Australian and Victorian Government funding.

90 PhillipsKPA, 2009, Higher Education and TAFE Equity Programs, p.28.
Adults without a school or post-school qualification are accepted into all Victorian universities. In most cases applications are dealt with through the Special Entry Access Scheme [SEAS] via the Victorian Tertiary Admissions Centre (VTAC). There are also pathways through foundation courses and vocational education qualifications. Victoria University, RMIT and La Trobe University also have programs targeting recent migrants and refugees. La Trobe tailors courses and student support specifically to adult learners and programs include flexible learning schedules with blocks of time for full-time study and reduced expectations at other periods allowing for work commitments. La Trobe and Victoria University also provide financial support to offset education-related costs.

Research suggests that, once enrolled, students from all backgrounds tend to perform at similar level. There is still a big challenge to ensure that all students are enabled to adapt to tertiary learning, cope with the social challenges of a tertiary institution, and are supported financially. If access is broadened, there will inevitably be an increased need for specialised support.93

6.15 RETENTION AND ATTRITION

In focusing on bachelor degree attainments, that is, successful completions, the Panel noted that improving rates of completion would enable the achievement of particular target attainments with fewer new commencements than if current rates of retention and attrition continue.

Studies of retention (and attrition – in a simple sense, the inverse of retention) and of degree completion show that considerable variation exists in these rates both between universities and between different fields of study.

A comprehensive study of 32 Australian universities in 2006 found overall (from a sample of nearly half a million undergraduate students) the retention figure to be 89.5 per cent, with an attrition rate of 10.5 per cent. This means 89.5 per cent of students stayed the course – either completing their course in that year or continuing in the following year – while 10.5 per cent dropped out.

Overall this study found:

- international students stayed the course better than Australian students
- female students stayed the course better than males
- undergraduates stayed the course better than graduate coursework students
- students in health, engineering, management/commerce, architecture and education stayed the course better than students in science, information technology, creative arts, society and culture, and agriculture and environment.

The study stressed the range of variation between universities (attrition rates ranged from 5.3 per cent to 30.3 per cent), between international and Australian students, and between fields of study.95

Somewhat similar data was collected up to and including 2008 by DEEWR for the Learning and Teaching Performance Fund distribution of funds based on performance.

RECOMMENDATION 30 That the Victorian Government should initiate a study to understand rates of attrition in priority fields of study and the reasons driving these rates.
CHAPTER 07: TERTIARY EDUCATION IN REGIONAL VICTORIA AND OUTER URBAN MELBOURNE

7.1 MAJOR CHALLENGES IN REGIONAL AND OUTER URBAN SETTINGS

The provision of higher education in regional and outer urban areas is a key area for the growth of tertiary education in Victoria. The Panel has received a number of briefings on these issues including presentations from DPCD, RDV, the chair of the Parliamentary Education and Training Committee, as well as insights provided by stakeholders at Roundtable forums held in regional and outer urban localities.

Victoria’s estimated resident population at 30 June 2008 was 5.31 million people, an increase of 92,500 people since June 2007. By June 2009, the population had reached 5.43 million, an increase of 120,000 since June 2008. This represents a growth rate of 2 per cent, which was significantly higher than the average annual growth rate (1.5 per cent) for the five years to June 2008. By 2036, the Victorian population is projected to reach 7.4 million, an average annual increase of 1.2 per cent.95 Regional Victoria is projected to grow to 1.86 million, an average annual growth of 1 per cent.

Over the decade from 1999, regional Victoria has changed fundamentally, with an acceleration of the trend that is changing the economy from one that was based on agriculture and resources to a more diverse, modern industrialised regional economy, with greater links and interdependence forming between the regions and Melbourne.

Growth and investment has helped the development of strong regional centres with a wide range of services. These include vibrant attractive towns with great local facilities including good schools and community learning centres; generally strong local community, health and business sectors; and substantial tertiary education campuses to develop skills, training and cultural, sporting and educational capacities.

According to a recent OECD report, regional universities are ‘centres of critical mass because intellectual inquiry and industry centres around them ... they attract skilled people to [a] region, they promote innovation and t... they are lubricants and catalysts of social endeavour’.96

Regional universities are employers that create full and part-time jobs and their infrastructure spending injects capital into the regions, helping to boost local economies. They provide sporting and cultural facilities that are available to the public and contribute to the human capital of a region through the development of local skills and a better educated workforce by strategically engaging with regional industry.97

95 Such volatile swings emphasise the need for constant monitoring and the need for the tertiary education plan to be dynamic and adaptive.
Ballarat University Technology Park

Some regional universities, including the University of Ballarat, have technology parks which enhance regional innovation and skills leading to the creation of industry and jobs. Around 1,350 people are employed in the Ballarat University Technology Park – around half of whom hold degrees from the University. There are strong associations between the University and industry tenants including IBM Ballarat, Emergency Services Telecommunication Authority, Rural Ambulance Australia, State Revenue Office, Global Innovation Centre, ID Research, and IBM Regional Software Solutions. Through these associations, the University has gained a national reputation as a telecommunication and IT hub. This direct and very practical association with the development and application of needed skills has enhanced many aspects of the education being delivered including academic competency, vocational opportunity, skills-based applicability, community engagement, social responsibility and economic leadership.

The economic impact of the University of Ballarat

In 2007, the University of Ballarat generated 3,150 jobs in central and western Victoria; it contributed more than $511 million to the western Victorian economy, $295 million in value-adding and $150 million in household income.

The University of Ballarat is a major regional employer, economic driver, infrastructure developer and telecommunications leader. It also directly contributes $500 million and 2,900 jobs annually specifically to the Ballarat economy, which is 10.5 per cent of the city’s economy, 11.8 per cent of household income and 8.5 per cent of employment.

There are, however, major challenges in extending and strengthening tertiary education in regional and outer urban settings. The first lies in the disparities in the proportions of young people completing advanced levels of education, and the second and related issue is ensuring higher proportions of qualified people remain and live in these regions.

One illustrative measure is the contrast in the attainment rate of bachelor degree holdings within the 25 to 34 age group in regional Victoria compared with metropolitan Melbourne. In 2006, while overall in Victoria this attainment rate was 33.7 per cent (and in Australia overall it was 29.4 per cent), the rates for Melbourne and for regional Victoria were respectively 37.6 per cent and 19.4 per cent. This is a big difference.

However, care is needed in interpreting the meaning of these variations. These figures are derived from the actual numbers and proportions of graduates in this age group who, in 2006, had Melbourne or regional home addresses. It is possible that these figures represent workplace differences – in terms of relative employment needs and priorities – rather than simply reflecting the numbers who were educated in the regions compared with Melbourne. Some graduates who were brought up and educated in regional Victoria will have moved to Melbourne for work, for example, and almost certainly they will outnumber those who moved from Melbourne to a regional location.
That said, other studies of participation, that take the home address of students at age 14 and then look at the institutions in which they were studying five years later, demonstrate that the educational participation of students varies considerably with their geographical location. It is well established that educational participation is lower in regional Victoria overall than in Melbourne overall, with substantial variations within different parts of regional Victoria, and no less substantial differences within different parts of Melbourne.

In its recent inquiry the Victorian Parliamentary Education and Training Committee took substantial evidence from submissions and from witness hearings across nine locations around Victoria, considering issues such as school achievement and completion, applications, offers and enrolment in higher education, university selection and admission processes, provision and accessibility across Victoria, financial issues for students, issues of transition, retention and completion of courses, and specific matters facing Indigenous students. Among its conclusions the Committee believes that Victoria’s Tertiary Education Plan, presents a valuable opportunity for raising overall higher education participation rates in Victoria, while simultaneously improving equity in participation. In this regard the Committee recommends that the Victorian Government set participation targets for under-represented groups, particularly those in rural and regional, interface and low socioeconomic status metropolitan areas. These targets should be supported through Victorian Government policies and programs aimed at lifting school achievement and completion of the VCE, raising aspirations for higher education, enhancing entry prospects, and reducing the practical barriers to participation.

FIGURE 6: SCHOOL LEAVER OFFER RECIPIENTS ENROLLING IN, DEFERRING AND REJECTING UNIVERSITY PLACES, BY HOME LOCATION (2005-06 TO 2007-08).

SOURCE: ADAPTED FROM THE PARLIAMENTARY EDUCATION AND TRAINING COMMITTEE ANALYSIS OF VTAC DATA.
Figure 6 shows the high and increasing trend in the rate of deferment in non-metropolitan areas. In 2007-08, one in three school leavers from non-metropolitan areas, who received an offer, deferred their studies. This is a worrying trend.\(^{103}\) While this is an accurate statement, it could be confusing to read in Section 7.4 of this Report that a study has found that ‘in 2007, deferral rates for non-metropolitan school leavers were 15.7 per cent’. The two figures are reconciled however, as one refers to the proportion who actually received an offer of a university place and chose to defer that offer, whereas the lower figure refers to the number of deferrers as a proportion of all students completing year 12 or equivalent in that year. This illustrates the care necessary in interpreting different data sets or different expressions of the same basic data.

Before giving the Panel’s response to proposals to set targets for participation of under-represented groups, the complexities of the issues around participation and retention of young people in regional communities need to be stressed. As introduced in Chapter 6, multiple factors can combine to reduce opportunities and limit the life chances and health of individuals and communities. These factors can include income, previous education and acquired skills, housing costs, health and geographical isolation. No less important are the aspirations of individuals, formed in large part by the influences of those close to them. Identified areas of disadvantage in regional Victoria include parts of East Gippsland and the Latrobe Valley and some large areas across the western part of the State. Some centres, such as Geelong and Shepparton, have areas of advantage and disadvantage in close proximity. It will not prove straightforward or simple to either identify a target which covers all of regional Victoria (or indeed outer urban Melbourne) or to differentiate a number of sub-regions and identify separate specific targets.

In all five Victorian non-metropolitan regions (Barwon South West, Grampians, Loddon Mallee, Hume and Gippsland), large numbers of young people (aged 15 to 24) leave to live in Melbourne. The demography of each region shows significantly low proportions of people aged 15 to 45 and the population is ageing in many areas (See Appendix 6 for further details). Many young people leave for education and do not necessarily return when their education is completed.

This trend tends to reinforce arguments for greater provision of higher education in regional areas with the intent of seeking to lift regional participation rates. The loss of this most mobile part of a community can also mean loss of energy, innovation and future family formation. But, for the young people concerned, it can also represent an opportunity to develop new skills and experiences in different and exciting environments. Rather than young people perhaps feeling forced to leave regional areas because of lack of opportunities, it is desirable to try to offer genuine choice with a balanced provision of local opportunities among the options available. This is easier in larger communities, but becomes more difficult in small towns and more remote settings. Encouraging young people back to regional areas requires the provision of adequate services and facilities. The outcome of achieving this could include population growth and the input of new skills and experience into local communities.

DEEWR student enrolment data shows the numbers of higher education domestic undergraduates with home addresses outside Melbourne who attend university campuses located in Melbourne. Tables 8 and 9 show that nearly twice as many regional students commuted or re-located to metropolitan university campuses compared to the number of metropolitan students who travelled or re-located to regional university campuses.

\(^{103}\) Parliamentary Education and Training Committee, 2009, p. 29.
### TABLE 8: STUDENTS WITH HOME LOCATIONS OUTSIDE MELBOURNE (REGIONAL STUDENTS) ATTENDING UNIVERSITY CAMPUSES WITHIN MELBOURNE (METROPOLITAN UNIVERSITY CAMPUSES), 2005 TO 2007.104

<table>
<thead>
<tr>
<th>Metropolitan university campuses</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACU</td>
<td>179</td>
<td>188</td>
<td>210</td>
</tr>
<tr>
<td>Deakin</td>
<td>685</td>
<td>743</td>
<td>835</td>
</tr>
<tr>
<td>La Trobe</td>
<td>1,647</td>
<td>1,711</td>
<td>1,803</td>
</tr>
<tr>
<td>Melbourne</td>
<td>2,460</td>
<td>2,330</td>
<td>2,231</td>
</tr>
<tr>
<td>Monash</td>
<td>1,580</td>
<td>1,653</td>
<td>1,786</td>
</tr>
<tr>
<td>RMIT</td>
<td>1,554</td>
<td>1,503</td>
<td>1,458</td>
</tr>
<tr>
<td>Swinburne</td>
<td>515</td>
<td>549</td>
<td>553</td>
</tr>
<tr>
<td>Victoria</td>
<td>904</td>
<td>920</td>
<td>995</td>
</tr>
<tr>
<td>Others105</td>
<td>13</td>
<td>71</td>
<td>146</td>
</tr>
<tr>
<td>Total</td>
<td>9,537</td>
<td>9,668</td>
<td>10,017</td>
</tr>
</tbody>
</table>

Around 10,000 regional students per year were identified as attending metropolitan university campuses. More than 2,000 regional students attended the University of Melbourne, and La Trobe, Monash and RMIT each attracted between 1,400 and 1,800 a year.

### TABLE 9: STUDENTS WITH HOME LOCATIONS IN MELBOURNE (METROPOLITAN STUDENTS) ATTENDING UNIVERSITY CAMPUSES OUTSIDE MELBOURNE (REGIONAL UNIVERSITY CAMPUSES), 2005 TO 2007.

<table>
<thead>
<tr>
<th>Regional university campuses</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACU (Ballarat)</td>
<td>n/a</td>
<td>77</td>
<td>104</td>
</tr>
<tr>
<td>Ballarat</td>
<td>595</td>
<td>603</td>
<td>566</td>
</tr>
<tr>
<td>Deakin</td>
<td>3,260</td>
<td>3,170</td>
<td>3,132</td>
</tr>
<tr>
<td>La Trobe</td>
<td>475</td>
<td>528</td>
<td>536</td>
</tr>
<tr>
<td>Melbourne</td>
<td>28</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Monash</td>
<td>1,279</td>
<td>1,044</td>
<td>918</td>
</tr>
<tr>
<td>RMIT</td>
<td>25</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Others106</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>5,664</td>
<td>5,468</td>
<td>5,347</td>
</tr>
</tbody>
</table>

In the reverse direction, between around 5,500 students with permanent home addresses in the Melbourne Statistical Division (MSD) enrolled in university campuses outside Melbourne. The largest number by far – over 3000 – attended Deakin University (mainly Geelong campuses which are readily accessible from Melbourne as well as many parts of regional Victoria).

The issue of retention of young people in regional areas is obviously very complex with a number of complicating factors including the costs of student relocation and living away from home; the frequency of deferments among regional students; the potential for stronger collaborations between universities and local TAFE institutions; and between universities and local economies through better linkages with industries and enterprises. These factors are dealt with in subsequent sections of this chapter. We start first with an overview of the findings and recommendations for improved structural cohesion within a state-wide framework and the setting of goals for regional participation.

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104 The numbers in Table 8 and 9 are derived from the DEEWR higher education data collection. The numbers include students whose permanent residential post code falls outside or within the Melbourne Statistical Division.

105 ‘Others’ includes James Cook University, Central Queensland University, Australian Maritime College, Charles Sturt University, The Southern School of Natural Therapies Limited, The Australian College of Natural Medicine, Northern Melbourne Institute of TAFE, Box Hill Institute of Technical and Further Education, Melbourne Institute of Technology, The Australian Guild of Music Education and William Angliss Institute of TAFE.

106 ‘Others’: Marcus Oldham College.
From the stakeholder meetings and roundtables held at regional locations, the Panel became aware of the differing needs and priorities and possible responses within the Victorian regions. The Panel encourages coordinated planning within each of the five non-metropolitan administrative regions in the State: to encompass more specific and regular interactions between the leaders at university campuses and their TAFE counterparts; to enable more effective planning and sharing of facilities; and coordinated development of programs which take better account of regional industry and labour market needs. Similarly, within each region the links between secondary schools and tertiary institutions could be strengthened to promote smoother curriculum transitions in key subject areas and more effective information sharing to benefit parents and families and students. The Panel believes that such region-wide associations would benefit from coordination at a State level and could include the facilitation of links at a national level.

7.2 SETTING GOALS FOR ADVANCING HIGHER EDUCATION IN REGIONAL VICTORIA

For Victoria as a whole, the Panel has recommended a goal of around 47 per cent bachelor degree attainment for the 25 to 34 year age group by 2025, and a 20 per cent undergraduate low SES participation rate for Victoria overall by 2020, based upon the demographics of the Victorian population.

The Panel has considered the desirability of setting parallel goals for regional attainment and for regional low SES participation. The setting of specific regional goals is likely to create incentives for regional Victoria and a more even spread of supporting investment. However, there are two difficulties. The first is that metropolitan Melbourne and the regions have such different starting points in terms of the stock of graduates as a proportion of the workforce. Achieving the same goal in both metropolitan Melbourne and the regions is likely to be unrealistic. The second is that there are significant differences in attainment and participation across regional Victoria, with the positioning of major cities which are growing strongly compared with other areas, which are in decline.

An alternative would be to set different goals for metropolitan Melbourne and for different parts of regional Victoria. While complicated but achievable, this could create an unhealthy environment in which regional institutions and students feel like second-class citizens. It may also send market signals to industry that the quality of graduates from any particular region is sub-standard. Given the importance of boosting the aspirations of students from regional Victoria, this approach would create more difficulties than it would solve. We do not support setting separate goals for metropolitan and regional Victoria.

The approach proposed here is achievable and yet encourages investment in regional Victoria. It involves combining a state-wide goal with a minimum growth goal for each of the five non-metropolitan regions.

**RECOMMENDATION 31** That by 2025 each non-metropolitan administrative region should achieve at least a 10 percentage point increase in the proportion of people in the 25 to 34 age group who attain a bachelor degree qualification; and that by 2020 each non-metropolitan region should achieve at least a five percentage point increase in the proportion of higher education undergraduate enrolments of people from a low SES background.
7.3 CREATING LINKAGES AND NETWORKS

The Panel suggests that the development of a Tertiary Education Plan for Victoria requires not only the creation of unprecedented numbers of highly skilled and knowledgeable workers, but also mechanisms through which knowledge and skills needs can be diffused and best utilised. The Panel recognises that linkages and networks need to be created – between enterprises, research and development and teaching institutions, and communities – so that needs and outputs can be coordinated.

Regional Development Australia (RDA) is an Australian Government initiative that aims to bring together all levels of government to enhance the growth and development of regional Australia.

The RDA network is being established throughout Australia to provide a strategic framework for economic growth in each region. There are four key functions that underpin the role of the national network of RDA committees:

- provide advice on consultation and community engagement
- regional planning
- promoting whole-of-government programs, policies and initiatives
- community and economic development.

The network will ensure that input is provided to the Australian, state and local governments on regional development issues and priorities; promote regions to secure sustainable long term jobs; promote investment and regional prosperity; and raise awareness of programs and services available to regional communities. The network will also play a key role in ensuring that advice about key issues in the regions is provided to all levels of government.

Regional Innovation Clusters Program

The Regional Innovation Clusters Program is an initiative organised through Business Victoria. It grows businesses and creates jobs and investment in provincial Victoria by supporting clusters. By encouraging innovation and building partnerships between higher education, research centres and private industry this program helps regional industries become more competitive, flexible and globally focused.

A cluster is a group of like industries located in close proximity that face common opportunities and threats. Clustering enables businesses to take advantage of synergies in marketing, manufacturing, logistics and other areas of competitive advantage. Successful clusters are characterised by geographic proximity, extensive collaboration, global orientation, specialisation and flexibility. An essential element for the successful formation of a cluster is strong linkages with higher education and research centres.
REPORT ADVISING ON THE DEVELOPMENT OF THE VICTORIAN TERTIARY EDUCATION PLAN

Chapter 07: Tertiary Education in Regional Victoria and Outer Urban Melbourne

Recommendation 32

That the Victorian Government puts in place initiatives to promote linkages between enterprises by extending its Regional Innovation Clusters Program on an industry sector basis in immediately relevant priority fields, where these do not already exist. To this end, the Victorian Government should establish an industry/tertiary education network program to assist formation of joint industry/education networks.

7.4 Deferral Trends in Regional Victoria

Deferral rates are rising among regional school completers not just in Victoria, but in other Australian states. In 2007, deferral rates for non-metropolitan school leavers were 15.7 per cent – two and a half times the rate for metropolitan school leavers (6.4 per cent).107

Students may have very different reasons for deferring their studies. Some defer to take a ‘gap year’, which may include paid or voluntary work and/or travel. But the ability to undertake voluntary work and/or travel is economically determined and generally an experience associated with privilege.

One third of all school leavers who deferred in 2007 cited the costs of study and financial pressure on family as a reason for deferral and around four in ten said they were waiting to access the Youth Allowance.108 As mentioned in the previous chapter, students from regional areas who enrol at metropolitan university campuses bear the additional burden of costs relating to relocation. Assuming tuition costs are deferred, the estimated cost of study and living in shared rental accommodation over the duration of a typical three-year undergraduate degree course is estimated to be around $66,000.

The decision to defer for financial reasons is disproportionately high and increasing in regional Victoria. Furthermore, deferring with the aim of earning enough to qualify as independent, and thus to claim eligibility for the Youth Allowance, is particularly problematic for young people in small regional communities where there is little in the way of employment. It is common for young people to juggle multiple jobs or to have to relocate to a metropolitan area for employment.

When contacted in 2008, 69.9 per cent of regional deferrers from 2007 had taken up a place at university; 9.3 per cent had entered VET courses mainly at Certificate IV or above; 3.1 per cent had entered traineeships or apprenticeships; of the remaining 17.7 per cent, 16.3 per cent were working; the remaining deferrers were either unemployed (1 per cent) or inactive (0.5 per cent), neither in education/training, nor working/seeking work. Of those in university or campus-based VET courses, over half were working while studying and nearly half of these were working 11 hours per week or more. A further 13.9 per cent of university students and 14.7 per cent of campus-based VET students reported that they were seeking work. This is indicative of the financial pressures faced by many students.

Despite these largely positive results, researchers have found that deferrers in regional Victoria (including those whose achievement profile is low and/or those who come from a lower SES background) are less likely to take up a place than others. Two thirds of respondents who were not in education or training cited financial barriers as the reason for not having taken up a place.109

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107 John Polesel, 2009, Deferring a University Offer in Regional Australia, Centre for Post-Compulsory Education and Lifelong Learning, the University of Melbourne, p. 2.


7.5 **PROVISION IN REGIONAL VICTORIA**

Australian Government funding guidelines for regional university campuses specify that, to be considered a campus, a site must have regular face-to-face teaching and entire courses must be delivered from the location. Across Victoria, university campuses vary significantly in size, from fewer than 1,000 students, through to many thousands. Small campuses offer fewer courses and may specialise in only one discipline. Modes of delivery vary, with some smaller campuses offering different balances of ‘blended learning’ – a combination of face-to-face and online or distance learning. (For details about the location of campuses and the range of subjects taught see Appendix 4).

**Broadband**

The Victorian Government’s policy framework for broadband contains six strategies for action:

> aggregate broadband demand to increase government purchasing power and facilitate improved community access to broadband infrastructure
> improve the delivery of government services through leading broadband use
> make available public infrastructure assets and use its role in planning to support strategic broadband projects
> assist industry and communities to develop innovative market solutions
> provide information that supports the development of broadband in Victoria
> advocate for the interests of Victorian broadband users.

While Victoria’s plan for broadband will continue to complement the Commonwealth’s national broadband policies, Victoria has continued to seek solutions to improve broadband coverage. New policies have been implemented – such as Innovation: Victoria’s Future – and supporting initiatives set up through the Collaborative Internet Innovation Fund, a $15 million competitive grants program to accelerate the innovative use of the next generation of ICT by Victorian government, business and community. Victoria would appear to be at the forefront of broadband innovation in Australia. The Panel supports the Victorian Government’s work on broadband and suggests that it maintains its focus on promoting high speed, low cost connectivity for regionally-based students and institutions.

110 Commonwealth Grant Scheme Guidelines No. 1, s.4.5.1.
7.6 CAMPUS PROVISION IN REGIONAL AND OUTER URBAN AREAS

Ten years ago, the Australian Department of Education, Training and Youth Affairs (DETYA, 1999) published a study on the correlation between regional participation rates and the provision of higher education across regional Australia. The study found participation rates are higher for both university and TAFE in metropolitan regions and they decrease progressively the further one moves from metropolitan centres to regions in rural zones, to regions straddling rural and remote zones, and remote zone regions. The difference is greater for universities than it is for TAFEs.112

A subsequent DETYA study (2000) found that ‘overall perceptions of the value of university education need to change in non-metropolitan regions before participation rates could approach those of metropolitan regions’. It concludes ‘much of the difference in participation appears to relate to the way regional communities relate to the education system’.113 In other words, if participation rates in regional Victoria are to increase, there is a need for a range of policy-driven initiatives aimed at educating parents about the long-term value of higher education, reducing fears about HELP debts to those who may be debt-averse, and, above all, raising the aspirations of the population in general.114

While regional students are therefore less likely to participate in tertiary education than metropolitan students, are regional students more likely to enrol in courses on regional campuses?

The Victorian Parliamentary Education and Training Committee Report (2009) cites an analysis of 2007-08 VTAC data to show:

- a slight majority (51.2 per cent) of regional school leavers enrolled in regional campuses, compared to 48.8 per cent who enrolled in metropolitan campuses
- 62 per cent of commencing students from non-metropolitan Victoria, who were not current school leavers, chose a regional campus location, while 38 per cent chose to attend a metropolitan university campus.

On Track data on the motivations of school leavers who chose not to participate in further education suggests that for some potential students local access is important. In the 2008 survey of year 12 completers, 17.5 per cent of those not in education or training cited the need to leave home as the reason for not studying, and 20 per cent cited ‘preferred course not offered locally’ as a reason. Regional respondents were more likely than metropolitan respondents to cite lack of access. While it can’t be assumed that these potential students would take up local opportunities even if they were available, this does suggest that for some young people from regional areas, lack of access to education and training opportunities is a deterrent to participation.115

There is an argument that participation is higher in regional areas where there is a university campus. On this the DETYA report specifically says the effect in substantive terms of the access variable is not huge. ‘Thus regions with sizable campuses, such as Bendigo ... only have participation rates around three percentage points higher than regions with virtually no access (holding socio-economic status constant).’

114 Stevenson et al, 2000, pp. 16-17.
Issues similar to those for regional communities now arise in outer urban communities, some of which are growing at unprecedented rates. As Bob Birrell and his colleagues found in a study (2008) for the Bradley Review:

In all Australian cities the relatively rapid outward extension of the suburban frontier has meant that the (typically) young families settling in these suburbs are often located long distances from a university campus. This is because Australia’s major universities are located near the centres of these cities. There has been some suburbanisation of these campuses since World War II, but usually with a significant lag behind the extension of the suburban frontier. This means that the young people located in outer suburbs often suffer a double or triple handicap as regards access to higher education. Their family income is usually modest, they live some distance from a university and therefore have to cope with costly and time expensive travel. Finally, they usually attend government schools where the median ENTER is generally below that necessary for entry to career-specific courses.¹¹⁶

Later in this Report there is specific consideration of particular outer urban and regional provision and the needs of communities.

RECOMMENDATION 33 That a pilot project is initiated in a regional location to build regional aspirations towards participation in higher education. The project should involve engagement with schools, students and their families and include:

> information about university courses and career advice including individually tailored advice and mentoring
> information about Australian Government financial assistance to students and how families in the regions can best use payment mechanisms
> university outreach.

While there is a body of research that supports the notion that increased provision would not substantially raise participation rates, there is no doubt that regional universities and campuses are highly valued by their host communities. These institutions are seen to play a vital role in regional development and economies and to provide significant employment opportunities as well as participating in promoting higher education and developing human capital. Graduates who have been educated in a regional university tend to remain in regional Victoria for work and metropolitan students who have moved to a regional area for study are more likely to remain there when their studies are completed – although how long they remain is open to question.¹¹⁷ Regional universities and campuses contribute to social and cultural development in their communities by providing among other things, access to sporting and cultural activities, information and communications technologies.¹¹⁸

Regional campuses contribute to local economic health and the economy of the State. Significantly, however, they have a vital role to play in preserving Victoria’s natural environment and resources. We need to acknowledge that with the challenges of climate change.

¹¹⁶ Birrell et al., 2008, p. 22.
¹¹⁷ See above, McKenzie & Frieden (2009) found that, for young people, attending a university campus in a regional area may delay migration to Melbourne rather than stopping it.
change, food security, water security and bio-security, skilling regional populations to improve water management, sustain bio-diversity and enhance farming is critical. It is vital that regional populations are engaged with research that can be translated into sustainable practice on the ground. Professor Ian Goulter argues ‘while much of the talk about the big issues facing our nation occurs in Canberra, or in the State capitals, it is easily forgotten that the solution for many of these challenges lies in the hands of rural and regional communities’.  

RECOMMENDATION 34

That the Victorian Government initiate an overarching policy and planning framework to: facilitate State-Commonwealth relations; provide an overview of, and coordinate and encourage active planning and collaboration within, each of the regions; and provide an overview of how education and training needs connect with industry and labour market needs. Goals for attainment and participation in higher education and in vocational education and training could be monitored and aligned.

7.7 REGIONAL LOADING

Smaller regional campuses experience diseconomies of scale – higher staff:student ratios are needed to sustain student support services and an adequate range of courses. Delivery to a more dispersed student catchment and a larger proportion of part-time, mature age and first generation students is also more costly. On top of this, it can be more difficult for regional campuses to attract international and other fee-paying students, and funding from business and industry, which makes them more reliant on government funding. La Trobe University calculates that provision at its four regional campuses costs between 25 per cent and 100 per cent more than at its metropolitan campus.

In recognition of the higher cost of regional provision, the Australian Government introduced a regional loading in 2004, ranging from 2.5 per cent to 7.5 per cent depending on the size of the campus and its distance from a mainland capital city. In 2008, Victorian institutions received $3.5 million in regional loading. The Panel was told by university representatives that regional loading was insufficient and falls short of the real costs of regional provision and that, in effect, most regional campuses are cross-subsidised by metropolitan campuses. Deakin University, for example, reportedly cross-subsidises its Warrnambool campus by around $10 million annually and the University receives only $600,000 per year in regional loading. Significantly, the University of Ballarat has argued that insufficient loading does little to assist the University to take proactive steps to redress low participation rates in regional areas. Importantly, campuses in interface areas do not receive loading, despite the fact that they often face very similar challenges.

The Bradley Report noted that within the university sector (nationally) there is informal acknowledgement that regional provision in many localities is close to unsustainable because of the cost. Furthermore, in a more competitive student-demand driven environment some university campuses in regional areas may become unviable. Regional loading was acknowledged to be a significant issue because it provides no clear incentive to any institution or provider to set up new programs in areas of need nor to work collaboratively with others to address real problems of provision in localities where there are not enough people to support a viable campus.

The Bradley Review recommended an additional $80 million per year from 2012 for ‘sustainable regional higher education provision’ to replace current regional loading arrangements. The Bradley Review also emphasised the need for ‘innovative, collaborative, local solutions’ to regional provision and suggested that some ‘rationalisation’ of traditional regional campuses may be necessary.\textsuperscript{120}

The Australian Government has recently announced that Richard Larkins is to head a Regional Provision Reference Group looking at a range of issues including loading.

\textbf{RECOMMENDATION 35} That the Victorian Government supports and contributes to the current review of regional loading and funding by the Australian Government. The Victorian Government should advocate the use of rigorous and accurate costing methodologies and also advocate that the Australian Government should implement its findings as quickly as possible and put in place transitional arrangements prior to the implementation of the long-term funding arrangements.

\section*{7.8 REGIONAL INITIATIVES AND LEARNING COMMUNITIES}

The Panel was impressed by initiatives such as the one taking place in the northern suburbs of Geelong. The Corio Norlane Neighbourhood Project encompasses a whole-of-community approach focused on health and wellbeing, crime and safety, employment, housing and physical environment, access to services, and civic participation as well as education. The Corio Norlane Development Advisory Board (CN DAB) aims to make the area into a ‘socially, economically, and environmentally sustainable community that offers the highest possible quality of life for all residents’ and it plans to do this through direct links with residents, local, State and Federal Government, community organisations, agencies and businesses. Through its Northern Futures economic development arm, the CN DAB has developed its own strategic development plan that reflects the objectives of both the Victorian Government’s Neighbourhood Renewal project and the Australian Government’s Social Inclusion policy. The aim is to ‘narrow the gap between disadvantaged communities and the rest of Victoria by encouraging collaboration between industry, community and government’.

In relation to education, priorities include: improving academic achievement; increasing attendance and engagement; informing and facilitating the Corio Norlane Education Regeneration and Community Schools Project; and promoting the importance of Early Years Development.

The CN DAB is partnered with Deakin University. There are well-established relationships between various project management teams and senior academics from across the faculties, as well as student placements, honours programs, guest lecturer programs and linked research projects. Through its association with Deakin, the CN DAB has recently been accepted as a full member of the WHO Alliance for Healthy Cities.\textsuperscript{121}

\textsuperscript{120} Bradley Review, p. xiv & 113.

\textsuperscript{121} www.corionorlane.org.au; personal communication: Ms Christine Ferguson, Manager, Housing & Neighbourhood Renewal, Dept of Human Services, Barwon South Western Region.
In Melton, the Shire Council is attempting to foster a community learning culture that provides world class learning opportunities and encompasses all age levels. The Shire is actively promoting Melton as a learning community by:

- working cooperatively with the tertiary education sector (in particular Victoria University) and the private sector to promote and expand the range of courses and facilities at the Melton Campus
- aiming for the provision of pre-school, school, tertiary, and adult and community education levels that reflect the needs of the community
- advocating for increased funding and resources for pre-school, primary, secondary, and special education
- increasing adult education, employment and training opportunities in the municipality
- developing and maintaining a community education plan
- reviewing access to education within the municipality
- linking economic development to vocational education
- establishing collaborative structures and mechanisms between schools and relevant community services, which support young people and their families.

The term ‘learning community’ describes a situation ‘where an array of groups and institutions have united forces to promote systematic societal change and share (or jointly own) the “risks, responsibilities, resources and rewards”’. Partners in a learning community typically include educational institutions, government bodies, industry partners and community groups in a way that produces ‘collaborative empowerment’. In Europe, in particular, the concept of learning towns, learning cities and learning regions has taken hold in response to global economic change; the advent of the knowledge economy; and the widespread impact and availability of technology. In Australia learning communities are not necessarily geographically bound and definitions may focus on common interests rather than geography. Interactions with others in a learning community can provide encouraging factors and ultimately aspiration for tertiary education (see below).

7.9 THE DELIVERY OF HIGHER EDUCATION THROUGH TAFE INSTITUTES

Smaller regional communities at some distance from larger higher education providers are benefiting from the delivery of higher education through TAFE institutes. Programs are designed and accredited by partner universities and delivered by TAFE staff. For example, Sunraysia Institute of TAFE has been doing this since the 1980s and is in partnership with La Trobe University’s Mildura campus. And, RMIT – a multi-sector institution – offers a Bachelor of Commerce degree in Bairnsdale which is delivered by the East Gippsland Institute of TAFE and includes compulsory work integrated learning units, supported by a local business mentor.

Establishing a mutually beneficial collaboration – where the infrastructure of one tertiary provider can be used by both VET and higher education – may go some way to improving choice and access for prospective students in regional areas as well as strengthening the viability of provision.
TAFE delivery of higher education in partnership with a university can be an especially effective model for smaller regional communities; add to the prestige of the institutions involved; reduce the cost of regional provision through better use of existing resources; and provide impetus for articulation pathways from VET. This model of delivery does, however, require special understanding of students’ needs by the partner university’s student support services.

Collaboration of universities and TAFEs to deliver higher education is discussed in more detail in the next chapter.

7.10 OUTER URBAN MELBOURNE

Largely due to sustained high levels of net overseas migration, Australia’s population is growing at its fastest rate in four decades. Outer Melbourne is growing more rapidly than most of Australia and the City of Wyndham in Melbourne’s outer west, is growing faster than anywhere else in the country, absorbing six new families a day.

As mentioned earlier, recent population growth in Victoria has been significantly higher than in previous periods, with metropolitan Melbourne experiencing the largest growth of any Australian capital city for the year to June 2008. Melbourne is home to more than 73 per cent of Victoria’s population. Growth in the general population produces a corresponding increase in the number of potential students for higher education. The growth is particularly acute in the outer West from Werribee, Wyndham Vale and Hopper’s Crossing, through to Laverton and Point Cook; in the Melton–Caroline Springs area, including Taylors Hill, Melton and Sunbury; in the north along the Hume Freeway from Greenvale through to Roxburgh Park, Craigieburn and Craigieburn West; and in the outer south east, from Berwick, through Cranbourne to Dandenong, Frankston and the Mornington Peninsula.

In contrast to the large campuses in inner metropolitan Melbourne – many of which are long-established and secure in terms of student populations – outer Melbourne is characterised by a large number of quite small higher education campuses, together with TAFE campuses which are generally positioned effectively.

For example, in 2008, Victoria University had 637 higher education enrolments at Werribee, 565 at Melton and 748 at Sunbury. In comparison, there were 9,257 at Footscray and 3,301 at St. Albans. Similarly, Monash University’s Berwick campus had an enrolment in the vicinity of 2,000 – again, a relatively small number in comparison with the Clayton campus of 25,700.

A recent study of student preferences in the outer western catchments, looking across the years 2001 to 2006, found that while reasonable numbers attend Victoria University, the take-up at the local campuses is small and over time has declined. In 2006, for example, 32.3 per cent of Melton higher education students went to Victoria University (67.7 percent went to other universities), but only 6.5 per cent attended the Melton campus. In Sunbury, 28.9 per cent of students went to Victoria University (71.1 per cent went to other universities), but only 6.7 per cent attended the Sunbury campus. In Werribee, 30.7 percent of students went to Victoria University, but only 5 per cent attended the Werribee campus. The study concludes:

Paradoxically, VU’s market share in the catchments and in the western suburbs could decrease if school retention rates and educational attainment levels increase unless VU is able to attract a higher proportion of high achieving students. The catchment campuses are currently not well-placed to do this. 126


As public transport connecting these outer urban areas improves and they become easier to reach, it might be thought that their attraction would increase. But improved transport means that it becomes easier for students from these areas to travel elsewhere – especially to universities in Melbourne. For students from Werribee, this also means Deakin University at Geelong, and for those from Melton, the University of Ballarat.

The Panel recognises that there are a range of problematic issues for communities when an established facility is effectively closed. Nevertheless, a university needs to carefully consider resource allocation issues and effective asset management and utilisation – even more so in an increasingly contestable environment. What is most relevant for government is ensuring adequate provision to meet the real, identified education and training needs of particular communities. Their needs may be effectively met in a variety of ways.

While the mission of a multi-sector university in the west of Melbourne seeks to meet and balance the total tertiary needs of its diverse communities, the issues posed for a university in the outer south east have somewhat different characteristics. Fortunately, the communities there have been well served by Chisholm TAFE, with major campuses at Berwick, Dandenong and Frankston, and smaller, but valued, centres also at Cranbourne and Rosebud. Chisholm has extensive and, in large part, modern facilities with some state of the art equipment; it shows effective leadership and sustained secure planning processes; it is well connected with local industry and workforce needs; and, above all, it is attuned to the priority needs of a student population which includes many who need support and explicit attention to building their confidence.

Monash University has recently formed an active major collaboration with Chisholm Institute, especially at Berwick, where each institution has a separate campus either side of a common adjoining roadway. This collaboration is part of an intention to grow Berwick student numbers substantially and so contribute a major response to state and national commitments to higher education growth. There may be opportunities to extend this collaboration along this outer south eastern corridor, given the location of the Monash campus at Frankston (Peninsula campus), with the two institutions jointly able to respond to evolving needs as higher education opportunities become a more realistic option for larger proportions of the youth in the region.

**RECOMMENDATION 36** That the Victorian Government endorses current directions of development for higher education provision in outer Melbourne as a result of projected population growth and progressively monitors the advance over time, with attention to:

- achieving an appropriate balance between TAFE and higher education provision
- ensuring education provision harmonises with industry needs and labour market priorities
- developing and sustaining effective working relations with schools and school authorities in the regions (the Northern, Western and Southern Regional Offices respectively).
7.11 COLLABORATIVE ACTION IN THE OUTER NORTH-WEST

A recent report, commissioned on behalf of La Trobe, RMIT, Melbourne and Victoria universities, focuses on the effectiveness of higher education and equity programs in Melbourne’s outer north-west. The universities concerned commissioned the report with the intention of identifying and sharing best practice for the benefit of the outer north-west.

The report highlights the fact that access to higher education and VET is strongly affected by the outcomes of previous educational attainment and training and recommends a number of focal points for targeted action:

- primary and early secondary school – when young people’s initial views about future education and training are developed and differences in levels of educational achievement become ingrained
- years 11 and 12 – as students prepare for VCE and VCAL
- early school leavers and options for re-entry into education and training
- adults without post-school qualifications.

Intervention by the universities to improve the representative composition of the student body could take the form of:

- financial assistance – whereby the cost of accommodation, living costs, tuition fees and/or the cost of education resources are variously met or subsidised
- educational support – to improve the knowledge and skills of potential applicants and to provide additional support once enrolled
- encouraging aspiration – including encouraging fair consideration of post-school education and training opportunities, needs and requirements and addressing any sense of social isolation from peers and family through action with those groups and linking potential applicants with others in the same position
- alternative or additional selection mechanisms – improving the likelihood of selection for applicants from under-represented backgrounds.

The target group identified for collaborative action by the universities involved in the north-west is ultimately the children, young adults and adults who require education and training. But, as outlined elsewhere, it is vital – if a significant improvement in outcomes is to be achieved – to engage schools and other education providers and the families and other related groups around potential students. In effect, the universities and TAFEs in the north-west have to provide potential students with the information, encouragement and support provided by families and community networks in more highly educated areas.

The report confirms that the major requirements for effective collaborative activity are:

- comprehensive coverage of all target schools
- general information to inform aspirations – not favouring particular outcomes over others – extending promotion to include VET and higher education
- a focus on students, schools and families.

Questions relating to ‘which institution?’ or even ‘which course?’ are of minor relevance in this level of collaborative activity. The goal is to ensure the maximum coverage of activity, reaching most, if not all, schools.

127 PhillipsKPA, 2009, Higher education and TAFE equity programs Programs in Melbourne’s Outer North West and their Effectiveness, Report for the Centre for the Study of Higher Education on behalf of La Trobe, RMIT, Melbourne and Victoria universities.
CHAPTER 08: ACCESS, CROSS-SECTORAL DEVELOPMENT AND PATHWAYS

While Victoria is already well-positioned with a number of multi-sector institutions and a range of emerging university/school collaborations, the need to grow tertiary education participation to align with the economic, cultural and social needs of Victoria requires that access to study in tertiary education institutions is improved. This means better defined pathways, institutional connectedness and robust alternative selection mechanisms. Improvements to access will only occur through better cross-sectoral linkages and collaborations.

There is strong evidence that university/school collaborations [e.g. Monash, La Trobe and Victoria University, discussed elsewhere] can be enhanced through the leveraging of Australian Government funding.

As discussed above, the Panel believes that the adequate preparation of students is the key to raising participation and attainment in tertiary education. The Panel is of the opinion that publicly-funded foundation programs, run by universities, TAFE/VET and/or schools, are the way to adequately prepare and maximise the prospects of students who, for one reason or another, have not had a conventional preparation for tertiary education.

Currently there are some problematic issues relating to access that require attention:

- articulation arrangements between TAFEs and universities are neither consistent nor transparent
- the focus should be on the need to reduce barriers for students – aiming for student centredness and institutional efficiencies
- the Credit Matrix, while potentially powerful, needs to be properly consolidated and communicated
- VET providers, particularly regional, lack the capacity for higher education delivery
- regional providers [higher education and TAFE] suffer diseconomies of scale
- different reporting, funding, quality assurance, industrial and curriculum frameworks constrain the development of higher education intake and create a structural divide between sectors.

RECOMMENDATION 37 That the Victorian Government identifies the need for, and the feasibility of, expanding the defined list of foundation programs to include university entrance programs for domestic students – as are currently offered to international students.
RECOMMENDATION 38 That the Victorian Government facilitates more consistent arrangements for, and develops a draft protocol around, the use of shared infrastructure by tertiary institutions.

8.1 TAFE DELIVERY OF HIGHER EDUCATION

There is a number of TAFEs that offer higher education programs and some have been doing so for a long time. Sunraysia Institute of TAFE began delivering higher education programs in the 1980s and today shares facilities and works closely with La Trobe at Mildura. Some metropolitan TAFEs offer a small selection of degree programs and RMIT – a multi-sector institution – offers bachelor degrees delivered by East Gippsland Institute of TAFE. Recently Deakin University was awarded $8.21 million from the Australian Government’s Diversity and Structural Adjustment Fund for the Deakin at your Doorstep project. As part of this initiative, its Warrnambool campus is developing a two-year associate degree program for students in regional and remote areas which will be delivered in partnership with TAFE institutes.

TAFE delivery of higher education in partnership with a university can be an especially effective model for smaller regional communities; add to prestige to the institutions involved; reduce the cost of regional provision through the more efficient use of existing resources; and provide impetus for articulation pathways from VET. This model of delivery does, however, require special understanding of student needs by the partner university’s student support services.128

Degree programs in TAFE institutes may differ from those delivered in universities. It has been argued that TAFEs have a greater capacity to meet the needs of industry, enterprises and students through their blend of the practical and the theoretical. TAFEs may collaborate more and have stronger partnerships with industry. The programs offered by TAFEs may be more applied and theoretically grounded; because of their industry experience, teachers may be able to demonstrate the relationship between theory and practice and may be able to leverage their industry contacts to provide opportunities for students in work placements.129

There may also be distinctions between the student cohorts and pedagogic approach of TAFEs and universities in teaching degrees courses that are worthy of consideration: students taking higher education degrees at TAFEs are often older and in work. TAFE pedagogy is flexible, student-centred, based on adult learning principles and delivered in a mixed mode where students are expected to be independent learners, self-motivated and to draw on examples from their own workplaces rather than necessarily have teachers provide examples.130

There is potential for greater collaboration in the delivery of higher education between TAFEs and universities in regional areas, but the different reporting, funding, quality assurance, industrial and curriculum frameworks of the TAFE and higher education sectors are constraining the development of higher education in TAFE.131

130 Ibid, p. 25.
131 Ibid, p. 11.
8.2 ARTICULATION AND CREDIT TRANSFER

Articulation from VET to higher education is an important alternative pathway. Students who were initially unable to gain entry to university may build their skills at TAFE and increase their chances of selection for the higher education course of their choice. Ian Young, Vice-Chancellor at Swinburne University of Technology (dual-sector), reports that data collected by Swinburne shows that, in 2006, approximately 28 per cent of commencing students at Swinburne articulated from TAFE. The original ENTERs of these students are unknown, but he believes that it is reasonable to assume that they were probably fairly low – maybe between 50 and 60. Generally speaking, students enrolling in higher education with scores at this level are likely to have low progression rates, but data from Swinburne shows that the students who articulated from TAFE in 2006 progressed at the approximately the same level as students who entered directly from year 12 – typically with ENTERs in the 80 to 90 band. Taking the pathway through TAFE has arguably resulted in achievement levels equal to students with ENTER values 30 points higher. Articulation through TAFE, Young argues, allows students’ study skills to mature.132 A review, completed in 2006 for the Australian Government, on credit transfer and articulation also found that students moving from TAFE to higher education with credit ‘perform as well or better than other student cohorts’ and that retention rates for this group of students may be higher.133

In addition to this, successful participation in VET can prompt students to seriously consider higher education for the first time and give them the confidence to apply. It is difficult to assess the extent of the movement between the VET and higher education sectors. Table 10 below shows that 11.5 per cent of commencing Victorian higher education students were admitted on the basis of previous TAFE study in 2008. It also shows significant variation across institutions.

TABLE 10: COMMENCING UNDERGRADUATE HIGHER EDUCATION STUDENTS ADMITTED TO VICTORIAN INSTITUTIONS ON THE BASIS OF A TAFE AWARD (2008)134

<table>
<thead>
<tr>
<th>Institution</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deakin University</td>
<td>797</td>
<td>12.4</td>
</tr>
<tr>
<td>La Trobe University</td>
<td>799</td>
<td>13.1</td>
</tr>
<tr>
<td>Monash University</td>
<td>676</td>
<td>8.1</td>
</tr>
<tr>
<td>RMIT University</td>
<td>1,216</td>
<td>21.1</td>
</tr>
<tr>
<td>Swinburne University</td>
<td>724</td>
<td>25.8</td>
</tr>
<tr>
<td>The University of Melbourne</td>
<td>89</td>
<td>1.6</td>
</tr>
<tr>
<td>University of Ballarat</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Victoria University</td>
<td>460</td>
<td>10.0</td>
</tr>
<tr>
<td>Other higher education providers</td>
<td>26</td>
<td>3.3</td>
</tr>
<tr>
<td>Total Victoria</td>
<td>4,787</td>
<td>11.5</td>
</tr>
</tbody>
</table>

133 PhillipsKPA, 2006, Giving Credit where credit is due: A national study to improve outcomes in credit transfer and articulation from vocational and technical education to higher education, final report produced for the Australian Government, Department of Education, Science and Training. 134 Parliamentary Education and Training Committee, 2009, p. 119.
135 Ibid.
There is a multiplicity of possible and actual pathways possible between the TAFE and university sectors and it is quite possible that only a few students might follow a particular pathway in a given year.\textsuperscript{136} This puts great pressure on institutional processes and it is clear, from discussions Panel members have had with representatives from a range of TAFEs and universities, that some universities have more capacity and willingness to work with articulating students than others.

Among TAFE institutes, other VET providers and universities there is a range of complex arrangements in place to support articulation, credit transfer and Recognition of Prior Learning (RPL). While articulation and credit transfers are recognised as being an integral part of institutional responsibilities, there are ongoing challenges which need to be overcome before the processes are as effective as they could be.\textsuperscript{137}

In Victoria, the Credit Matrix was developed to improve credit recognition between sectors by creating clearly classified qualifications and assigning values or points to units and modules within qualifications. The Credit Matrix is intended to provide a common way of describing and comparing learning across all courses and qualifications\textsuperscript{138} and consistent but flexible university entrance requirements for students without an ENTER. As mentioned above, while potentially powerful, the Credit Matrix needs to be consolidated and communicated so that it can be properly effective. Progress of students between sectors still remains at ‘the whim of individual institutions’.\textsuperscript{139}

A number of institutions have actively developed the pathway between TAFE and higher education. Articulation between Swinburne’s TAFE and higher education divisions is facilitated by their Pathways Program, which enables students from Swinburne’s TAFE division and other TAFEs who have a minimum credit average in their final year of TAFE study to apply for entry into a higher education course. An online Credit Transfer Database provides guidelines for students about their eligibility for credit transfer.

Deakin University (not multi-sector) has also put in place strong articulation pathways for TAFE students and has strong relationships supported by a four-way strategic alliance with Box Hill Institute of TAFE, Gordon Institute of TAFE and South West Institute of TAFE. Through this alliance, articulation and credit transfer is possible with guidance on credit transfer provided on an Advanced Standing (Credit Transfer) database on the Deakin University website. La Trobe and Monash Universities also focus on increasing articulation arrangements as part of broader strategies of cooperation with TAFE institutes.\textsuperscript{140}

**Flow of students between TAFE and higher education**

Although building higher education enrolments and attainments has led to a focus on pathways from TAFE, from a tertiary education perspective it is just as important to highlight the reverse flow of students. For example, having completed a bachelor degree in information technology, upskilling at TAFE with practical education and training in the systems used by major international companies can help make graduates more employable or help those in employment to progress their careers.

There is evidence that the numbers of university graduates who subsequently enrol in TAFE are comparable with the numbers of university entrants admitted on the basis of TAFE qualifications.

With some TAFE institutions now accredited providers of higher education, this interface, and the flows of students across it, will become increasingly permeable.

\textsuperscript{136} PhillipsKPA, 2009, p. 39.
\textsuperscript{137} Ibid, p. 6.
\textsuperscript{138} Ibid, p. 1.
\textsuperscript{139} Appendix 7 of the Victorian Submission to The Review of Higher Education, p. 71.
8.3 PARTNERSHIPS FACILITATION FUND

The Panel proposes the establishment of a competitive fund to facilitate partnerships between TAFE and higher education institutions so that complete or partial degree level qualifications can be delivered using existing Victorian infrastructure and resources.

It is proposed that TAFE institutions be given the opportunity to apply for funds, on behalf of a consortium of partners, from a central contestable funding pool governed by Skills Victoria and Regional Development Victoria. Applicants would need to meet eligibility criteria to successfully obtain grants over a period of three years.

It is envisaged that, through the establishment of further partnerships between the VET and higher education sectors, greater outreach of higher education will be enabled, improving access for regional students. Regional students would be provided with greater flexibility and choice through improved pathways and options for study; resource efficiency would also be improved.

Funds would favour proposed partnerships that aim to meet the following criteria:

- courses on offer are of degree standard
- commitment to student services support in blended learning delivery
- local employment needs being matched by courses on offer
- partnering institutions making a partial funding contribution
- partners able to access matching Structural Adjustment and Diversity funding from the Australian Government (e.g. Partnership Fund and/or Structural Adjustment and Diversity Fund).

The establishment of this fund would provide:

benefits to universities which could include:

- opportunities to grow new student markets (and therefore obtain increased funding) that may have previously not opted to study at a university level. This becomes increasingly important in a demand driven system

benefits to TAFEs which could include:

- VET qualifications that articulate into higher education qualifications, delivered from a single TAFE campus, may have added appeal to students whose year 12 results did not allow them to enter straight into higher education
- greater collaboration with universities may lead to the creation of seamless advanced standing and articulation arrangements
- additional students on TAFE premises may contribute to a more appealing campus atmosphere
- better utilisation of TAFE infrastructure and other Victorian Government assets
- increased leverage as a broker in partnerships with higher education institutions.

benefits to students which could include:

- students from regional areas would have greater access to higher education and may not have to move to metropolitan areas or regional capitals to gain an ‘on campus’ higher education experience. Financial constraints may therefore be avoided
- students would be provided with greater flexibility and choice in their tertiary education experience, that is, a student may choose to begin a VET qualification at their local TAFE campus, articulate into a higher education qualification and complete a year, then move to Melbourne to complete their degree. This could save students substantial costs.
greater rates of deferral for regional students suggests some students in regional areas are choosing not to take up offers in higher education. Through partnerships and improved access, this growing rate is likely to be addressed.

> increased access for mature age students who may wish to take up degrees part-time or through distance learning and would appreciate interaction with fellow students.

benefits to regional development which could include:

> regions would have added capacity to retain local students who will then be more likely to enter the workforce locally
> a boost to the higher education attainment rates of regional Victorians creating a more skilled workforce and more productive regional economies
> better relationships between the VET and higher education sectors which could add value to the implementation of the current workforce development strategies being developed in each of Victoria’s non-metropolitan regions.

RECOMMENDATION 39 That the Victorian Government establishes a competitive Partnerships Facilitation Fund to facilitate partnerships between TAFEs and higher education institutions where complete or partial degree-level qualifications can be delivered using existing Victorian infrastructure and resources.

8.4 ARTICULATION AS AN EQUITY STRATEGY

Compared to the higher education sector the VET sector does well in terms of access and equity. Participation in VET is higher in areas of low socioeconomic status and relatively high in non-metropolitan areas. In 2006, the VET participation rate among 15-19 year olds in regional Victoria was approximately 17 per cent compared to 11 per cent in metropolitan Melbourne. According to Richard James, Centre for the Study of Higher Education, University of Melbourne, articulation from VET is one significant way of tackling the problem of under-representation.\textsuperscript{141}

A number of commentators have pointed out that relatively few students currently take up the opportunity to articulate between TAFE and higher education. In the 2006 review of credit transfer outcomes completed for the Australian Government, mentioned above, it was suggested that this may be due to a lack of understanding of pathways or limited marketing on behalf of the universities. It may also reflect a distinct preference among some TAFE students for vocationally oriented learning.

On the other hand, the VET Student Outcomes Survey in 2007 found that 6.3 per cent of all VET graduates at Certificate I or above went on to university within a short period; among Diploma and Advanced Diploma graduates, 17 per cent went on to higher education. Both of these figures were substantially higher for students aged 15 to 24. In this age group, 9.9 per cent of VET graduates went on to higher education, including 27.9 per cent of Diploma and Advanced Diploma graduates. It is possible that this indicates that some school leavers who miss out on a higher education place instead begin with a TAFE course with the intention of moving to university later. Or, perhaps, that success in VET gives students the confidence and aspiration to have a go at an undergraduate degree.

\textsuperscript{141} Transcript of Evidence cited by the Parliamentary Education and Training Committee, 2009, p. 122.
8.5 ASSOCIATE DEGREES

Associate degrees are aimed at students who are capable of undertaking higher education, but may be less prepared for university. Using mechanisms such as smaller class sizes and more support from the academic staff through additional on-campus contact hours, the associate degree provides a viable transition between the directed learning at secondary school and the independent learning expected at university.

At Swinburne University, for example, the Associate Degree in Engineering provides a broad-based point of entry into employment as a para-professional engineer and a pathway for graduates to articulate into an undergraduate engineering degree course. The course provides an introduction to the foundation studies of civil, mechanical and electrical engineering, together with engineering management and a range of vocationally orientated subjects, which are intended to prepare students for employment in a dynamic and changing workforce.

Deakin University is using the associate degree concept to improve access to higher education for students in regional and rural areas. The new Associate Degree of Arts, Business and Sciences is part of the Deakin at your doorstep initiative which, from 2010, will provide students with the opportunity to study in Bairnsdale, Dandenong and Swan Hill, and from 2011 in Mildura, Rosebud and Sale. The associate degree will also be offered via Deakin’s Warrnambool Campus. The Associate Degree of Arts, Business and Sciences is a two-year, full-time (or part-time equivalent) course. Students will be able to choose to study a variety of areas or specialise in a number of streams including arts, business, education, health or sciences. The course is targeted at people returning to study or students who have just completed year 12, and is intended to introduce them to university study in a supported tertiary environment and to encourage the development of academic and problem solving skills. Students who study for Deakin’s associate degree through one of the University’s TAFE partners (East Gippsland, Chisholm and Sunraysia) will study concurrently for a diploma qualification. Those who successfully complete the associate degree will be guaranteed a place in a range of Deakin bachelor degrees, offered either at the Warrnambool campus or through off-campus study. They may also gain up to 18 months credit in their chosen degree.

The Panel believe that there is considerable potential in universities and TAFEs working collaboratively in partnership on a range of issues to do with articulation, preparation of students and the TAFE delivery of higher education in regional areas.

8.6 SELECTION FOR TERTIARY EDUCATION

Selection mechanisms, such as ENTER, are intended to sort school leavers by academic merit and to identify those most likely to succeed in the tertiary education course for which they are applying. But, although there is an assumption that school leavers compete on a level playing field, there is a number of factors that make it more difficult for students from under-represented areas and groups to attain high ENTERs. These include the range of subjects offered and the academic environment within a school; opportunities to participate in extension and revision activities; and a range of personal barriers to achievement. Selection processes for tertiary education are not only controversial in Australia; they are ‘the source of disquiet and controversy around the world’ and are criticised on equity grounds because they reflect geographical and socioeconomic differences in academic achievement at school and therefore restrict access to higher education for prospective students from certain areas and backgrounds. The Bradley Review noted that reliance upon the ENTER as a selection mechanism in Australia tends to replicate the existing student profile.
The Victorian Tertiary Admissions Centre (VTAC) administers and coordinates Victoria’s tertiary admission process and estimates that 75 per cent of offers are based predominantly on ENTER. Other criteria and selection methods are sometimes used, in addition to the ENTER, by some universities for some courses – including, for example, aptitude tests for medicine and health sciences, interviews and portfolios. Reliance upon ENTER as a measure of academic merit and preparedness for university study is greatest in the courses for which there is highest demand and where there needs to be, as far as possible, objective and fair sorting of applicants.

The ENTER is a relatively transparent and objective system and administration of the process by VTAC allows universities institutional autonomy over selection decisions – but there are significant problems with it and James et al (2009) have provided a summary of some of them:

> ENTERs are highly correlated with SES and their use results in significant imbalances in tertiary education participation.
> ENTERs are not wholly successful in predicting university performance, except for high scores where predictive capacity is strong.
> Teaching, learning and assessment at high school level are influenced by the computation of ENTER, and this can ‘create narrowly instrumental approaches and place undue influence on examinations as a form of assessment’.\textsuperscript{146}
> The timeline for decision making by school leavers is tightly compressed by the ENTER system and may leave insufficient time for considered appraisal of programs.
> Selection based on ENTER may encourage school leavers to make competitive course/institution choices rather than informed choices.

James and his colleagues are of the opinion that achieving the Bradley targets for expansion and equity nationally will require significant reconsideration of the ways universities engage with communities and recruit and select students. This, they suggest, will involve: ‘developing a more diverse tertiary sector, new conceptions of the purposes of higher education, new curricula, expanded pathways into and within higher education, and new relationships between higher education and vocational education and training’.\textsuperscript{147} Certainly, if there is to be a universal entitlement to tertiary education, then new concepts of merit and preparedness will have to be recognised. Potential students will need to demonstrate, first and foremost, their capacity for higher education without necessarily having to show that they are more capable than other applicants. Students will be more diverse and, in some cases, selection procedures will need to be replaced by recruitment processes.

**RECOMMENDATION 40**

That the Victorian Government works with institutions to devise entrance processes to tertiary education that will enhance and complement the ENTER. These should take the form of a common framework of mechanisms that assess student capacity, aptitude and motivation. Principles of transparency, equity and efficiency should guide their use.

\textsuperscript{146} Ibid, p. 2.
\textsuperscript{147} Ibid, p. 7.
James and his colleagues speculate that, in the future, universities with courses in high demand will have to find equitable ways to select or reject students from the large number of applicants who have demonstrated preparedness and merit. On the other hand, for institutions with courses for which there is lower demand, the emphasis will shift from selection to recruitment. Admissions processes will need to focus more on matching individuals’ needs and abilities with specific programs and ensuring that their academic backgrounds offer reasonable chances of success. Then there are likely to be institutions that are highly ‘open’ and enrol students regardless of their academic backgrounds. The missions of educational institutions in this scenario would be quite diverse.148

Alternative selection

As these four universities propose, it would be most sensible for them to cover under-represented groups by reducing reliance upon ENTER:

- La Trobe – School Access La Trobe (SALT)
- RMIT – Schools Network Access Program (SNAP)
- Melbourne – Access Melbourne
- Victoria University – Portfolio Partnerships Program (PPP).

Each program operates in parallel with the ENTER system. RMIT and Melbourne set 20 per cent targets for admission through alternative pathways. SALT, SNAP and PPP have common approaches whereby participant schools identify potential candidates. The emphasis of Access Melbourne is to find the underlying capacity of the applicant which is consistent with the University’s aim to educate the most academically able. La Trobe tends also to use academic capacity as a filter. In contrast RMIT emphasises overcoming disadvantage where an applicant meets minimum requirements. And Victoria University looks for evidence of aptitude and commitment for a specific course. 149

SALT is distinctive for making offers in advance of students receiving their ENTER and there is potential, with the lifting of restrictions on enrolment, for other universities to operate in advance of the standard admissions processes.

Access Melbourne is open to all students who can prove a low SES background but does focus on schools under-represented at Melbourne. SNAP draws from government schools across the north and west; PPP covers most schools in the west and some in the north; and SALT covers most northern schools.

- 23 schools in the north and west are eligible for all four programs
- 34 are eligible for three
- 18 are eligible for two
- 20 for one.

There are apparently more than 30 schools in the north and west not covered by any of the programs.

As these four universities propose, it would be most sensible for them to consider the coverage of under-represented schools collectively to ensure that all schools are included and that there are sound reasons why some schools should be included in multiple programs. Rather than agreeing exclusive zones, the emphasis should be on complete coverage and equal opportunity.

149 PhillipsKPA, 2009, Higher Education and TAFE Equity Programs in Melbourne’s Outer North West and their Effectiveness, Report for the Centre for the Study of Higher Education on behalf of La Trobe, RMIT, Melbourne and Victoria universities.
Student Aptitude Test – pilot program

DEEWR has introduced a pilot program of the Student Aptitude Test for Tertiary Admission (SATTA). The pilot program, uniTEST, has been developed to assist universities with the processes of student selection.

The test is designed to assess generic reasoning and thinking skills that underpin higher education study. It tests current year 12 students who wish to go to university across the two broad domains of mathematics and science, and humanities and social sciences, without being subject specific.

Flinders University, Macquarie University and the Australian National University are currently using uniTest for their 2010 admissions.

Youth Transition Pathways

In September 2008, DIIRD and DEECD agreed to establish the Interdepartmental Policy Unit, Youth Transition Pathways. The Unit is responsible for the development of a new policy framework for youth transitions.

The aim of the new policy framework is to increase the proportion of young people completing Year 12 or its vocational equivalent, continuing on to higher levels of education and training and moving successfully into strong career paths. This will include examining how students can be better prepared in terms of skills and knowledge for tertiary education and how articulation between the different education and training sectors can be improved. The unit will report its findings in 2010.

The Panel is aware of the work being done by the Youth Transitions project team and acknowledges that its relevant findings will need to be reflected in the Tertiary Education Plan.

8.7 BUILDING PARTNERSHIPS

The success of outreach programs relies upon strong and enduring partnerships between universities and schools and especially the commitment and support of the school leadership team. Victoria University has been commended by the Australian Universities Quality Agency (AUQA) for its success in building effective relationships with schools. Victoria University’s Access and Success program is based on a respectful approach by the university to the school and is integrated with the school’s strategic plan. The Panel believes that Victoria University’s model could provide a valuable example for other universities seeking to build and strengthen partnerships with schools in outreach activities.150
A strong and effective partnership between a university and a regional school could provide the school with access to facilities it may lack as well as allowing students to develop an understanding of university life. Clustering arrangements between schools could make outreach activities easier in non-metropolitan areas.

Presuming that the goal is increased participation by low SES groups and not competition for high achieving students, there is also a strong argument for collaborative approaches to outreach activities. Outreach could be approached as a joint responsibility within the higher education sector, underpinned by a collaborative approach to ensure the focus is on lifting participation rates in under-represented areas – not on recruitment for any single institution. Pooling resources would avoid a duplication of effort and open up the benefits to a wider audience of potential students.\(^\text{151}\)

A recent OECD report argues:

> Effective engagement is much less about structures, and more about people actually wanting to ensure that relationships are developed, managed and sustained. But in a tight economic climate, this activity has to be funded, and value has to be seen to be created and delivered for all parties. Government ‘seed’ funding can be important in this respect, but it is not the role of government to dictate terms of engagement through program funding frameworks, guidelines and conditions. Government needs to act as a partner – not just as a resource provider (although the resources are nice to have).\(^\text{152}\)

It is the Panel’s view that partnerships are only effective and sustainable if properly resourced and achievements and problems evaluated. Furthermore, the Panel believes that effective partnerships are key to lifting low SES participation.

### 8.8 COMMUNITY ENGAGEMENT

Outreach need not be only directed at schools. Without a broader community focus, higher education institutions would struggle to connect with communities that are ‘economically disadvantaged and disengaged from education’.\(^\text{153}\) New models of outreach should ‘shift focus substantially from school-based to community-based activities through multiple sites of engagement, which can result in long term sustainable relationships building trust and mutual benefit between all stakeholders’. The emphasis here is on sustained commitment on an ongoing basis to produce a cultural shift. This would require the long-term commitment of all key stakeholders and the collaborative development of programs contextualised for specific community contexts.\(^\text{154}\)

Again, Victoria University provides a practical illustration of how community engagement and outreach can be successfully combined. The University’s Access and Success program includes a Kinda Kinder component that seeks to address low levels of pre-school participation in parts of Melbourne’s west by engaging with parents and children in their local public library. Research has suggested that engagement at this level has an important impact on a community’s disposition to schooling and further education.\(^\text{155}\)

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151 Ibid, pp. 92-4.
155 See break out box elsewhere.
8.9 ADULT AND COMMUNITY EDUCATION

Community education can also provide a pathway to tertiary education. The Adult and Community Education (ACE) organisations are part of the VET sector and they provide diploma and advanced diplomas. In Victoria the ACE sector has developed specific expertise in working with people from educationally and socio-economically disadvantaged backgrounds. They also provide a critical point of re-engagement for many people who are disconnected from education and lack the confidence or opportunity to re-connect through other providers. A number of ACE providers have formed partnerships with higher education institutions and these arrangements could provide a useful model for further engagement between the sectors.156

8.10 RESOURCING OUTREACH PROGRAMS

Considerable investment of time and resources is required in order to run successful outreach programs and, from an institutional perspective, there may be little direct financial pay-off in terms of student enrolments. The new participation targets warrant increased funding and the Australian Government has allocated $325 million over four years to universities who attract and retain low SES students and $108 million to enable universities to build partnerships with schools and VET providers in low SES areas.157

156 Personal communication, Sandy Forbes, ACFE Board, October 2009.

157 Victorian submission to the Review of higher Education p 38


# Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>ACE</td>
<td>Adult Community Education</td>
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<td>ACEL</td>
<td>Australian Council of Educational Leaders</td>
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<td>ACU</td>
<td>Australian Catholic University</td>
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<td>AMES</td>
<td>Adult Multicultural Education Services</td>
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<td>AQF</td>
<td>Australian Qualifications Framework</td>
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<td>ARC</td>
<td>Australian Research Council</td>
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<td>ATAR</td>
<td>Australian Tertiary Admissions Rank</td>
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<td>CAE</td>
<td>Council for Adult Education</td>
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<td>CEQ</td>
<td>Course Experience Questionnaire</td>
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<td>CEET</td>
<td>Centre for the Economics of Education and Training</td>
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<td>COAG</td>
<td>Coalition of Australian Governments</td>
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<tr>
<td>CSIRO</td>
<td>Commonwealth Scientific and Industrial Research Organisation</td>
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<td>CSP</td>
<td>Commonwealth-supported Places</td>
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<td>CN DAB</td>
<td>Corio Norlane Development Advisory Board</td>
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<td>DEECD</td>
<td>Department of Education and Early Childhood Development</td>
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<td>DEEWR</td>
<td>Department of Education Employment and Workplace Relations</td>
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<td>DETYA</td>
<td>Department of Education, Training and Youth Affairs</td>
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<tr>
<td>DIIRD</td>
<td>Department of Innovation, Industry and Regional Development</td>
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<tr>
<td>DPCD</td>
<td>Department of Planning and Community Development</td>
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<tr>
<td>ENTER</td>
<td>Equivalent National Tertiary Entrance Rank</td>
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<td>FTE</td>
<td>Full Time Equivalent</td>
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<td>GAT</td>
<td>General Admissions Test</td>
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<td>GCA</td>
<td>Graduate Careers Australia</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GDS</td>
<td>Graduate Destination Survey</td>
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<td>GFC</td>
<td>Global Financial Crisis</td>
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<tr>
<td>Go8</td>
<td>Group of Eight universities: Adelaide, Australian National, Melbourne, Monash, New South Wales, Sydney, Queensland, Western Australia</td>
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<tr>
<td>HE</td>
<td>Higher Education</td>
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<td>HECS</td>
<td>Higher Education Contribution Scheme</td>
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<td>HELP</td>
<td>Higher Education Loan Programme</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>ITC</td>
<td>Independent Tertiary College</td>
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<td>LGA</td>
<td>Local Government Area</td>
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REFERENCES


REFERENCES


Lane, Joe, 2009, Indigenous Participation in University Education, The Centre for Independent Studies, St Leonards, NSW.

Lamb, Stephen & Kate Mason, 2008, How Young People are Faring ’08: An update about the learning and work situation of young Australians, Foundation for Young Australians, Centre for Post-compulsory Education and Lifelong Learning (CPELL), the University of Melbourne.

Lawrence, Jill, 2003, The ‘deficit-discourse’ shift: university teachers and their role in helping first-year students persevere and succeed in the new university culture’, UltiBASE Articles, [ultibase.rmit.edu.au/Articles/march03/lawrence1.htm].


OECD, 2001, *Cities and Regions in the New Learning Economy*, [www.oecd.org/document/6/0,3343,fr_2649_35961291_2010118_1_1_1_1,00.html].

OECD Programme on Institutional Management in Higher Education & Directorate for Public Governance and Territorial Development, 2008, *Review of Higher Education Institutions in Regional Development*. [www.oecd.org/department/0,3355, en_2649_35961291_1_1_1_1_1,00.html].


PhillipsKPA, 2006, *Giving Credit where credit is due: A national study to improve outcomes in credit transfer and articulation from vocational and technical education to higher education*, final report produced for the Australian Government, Department of Education, Science and Training.


Polesel, John, 2009, *Deferring a University Offer in Regional Australia*, Centre for Post-Compulsory Education and Lifelong Learning, the University of Melbourne.


REFERENCES


APPENDIX 1

Panel members’ biographical details and secretariat details

Emeritus Professor Kwong Lee Dow AM

Kwong is Deputy Chair of Teaching Australia and was the Deputy Chair of the Interim Board of the National Institute for Quality Teaching and School Leadership (NIQTS). In 2006, he was interim Vice-Chancellor of the University of Ballarat and was previously Vice-Chancellor of The University of Melbourne; Chair of the Commonwealth Review of Teaching and Teacher Education; a Member of the Higher Education Council of the National Board of Employment, Education and Training; Founding Member of the Hong Kong Council for Academic Accreditation; Adviser and Council Member of the Hong Kong Institute of Education, and Fellow of the Australian College of Educators. He has chaired the Board of the Victorian Curriculum and Assessment Authority, and its predecessors, the Board of Studies and the Victorian Institute of Secondary Education.

A recipient of the Australian Chinese Achievers’ Award and the Sir James Darling Medal of the Australian College of Educators, Kwong is also an Honorary Life Member of the Australian Association for Research in Education. In 2005 he received a Gold Medal from the Australian Council for Educational Leaders (ACEL).

Dr Bronte Adams

Bronte is the Principal of Dandolo Partners, a consultancy firm which advises across a range of public policy issues, particularly in the areas of telecommunications and technology, education and training, health and the arts. She has worked in senior positions in both the public and private sectors and provided advice to government on a fundamental review of Victoria’s education legislation in 2005. Bronte has also advised the government on improving collaborations between universities and Small and Medium Enterprises, and TAFE governance in Victoria.

Jennifer Dawson

Jenny is a member of the Victorian State Regional Development Advisory Council and has recently been appointed as the inaugural Chairman of the Regional Development Australia Committee for the Loddon Mallee Region.

She is an Independent Director on the Bendigo and Adelaide Bank Board, Chair of Sandhurst Trustees Limited and a director of Coliban Region Water Corporation and Community Sector Enterprises Pty Ltd. She spent 10 years with Arthur Andersen in the audit and IT controls division and has experience in the areas of corporate governance, financial audit and reporting, and risk management.

David Phillips

David is Chairman and Director of the education sector consultancy company PhillipsKPA. He is widely acknowledged as one of Australia’s foremost experts in higher education management and policy and has provided consultancy services to all of Australia’s public universities. David also has extensive experience in the vocational education and training sector and a distinguished career in government. David was the founder and Managing Director of Phillips Curran from late 1996 until the merger with KPA Consulting to form PhillipsKPA. Before establishing Phillips Curran, he was the head of the Higher Education Division in the Australian Government’s Department of Employment, Education and Training. He was previously Senior Advisor and Consultant to two Australian Government Ministers for Employment, Education and Training. He was a key advisor on institutional and student financing for the Bradley Review.
Secretariat to the Tertiary Education Expert Panel  
(Some members were part-time and some participated for part of the project only.)

Kirsten Bright

Andy Butterfield (from September 2009)

Dr Carolyn Daniel

Kate Ritchie

Nick Thorburn (until August 2009)

The Panel was also assisted by the Higher Education Group in Skills Victoria, particularly Matthew Harris and Brendan Sheehan.
APPENDIX 2

MINISTERIAL ROUNDTABLE MEETINGS

Location: Geelong
Host: Deakin University
Date: Wednesday, 12 August, 2009
>
> Professor Sally Walker, Vice-Chancellor, Deakin University
> Bruce Anson, CEO, Warrnambool Shire Council
> Robin Buckham, Deputy Vice-Chancellor (International and Development), Deakin University
> Kean Selway, Pro Vice-Chancellor (Enterprise) and CEO of DeakinPrime, Deakin University
> Professor Sue Kilpatrick, Pro Vice-Chancellor (Rural and Regional), Deakin University
> Professor David Battersby, Vice-Chancellor, University of Ballarat
> Grant Sutherland, CEO, The Gordon Institute of TAFE
> Joe Piper, CEO, South West Institute of TAFE
> David Cotsell, Golden Plains Shire Council
> Ed Coppe, Chair, Geelong Region Alliance [G21]
> Georgina Parker, BioGeelong Cluster Facilitator, Economic Development, City of Greater Geelong
> Sue De Gilio, CEO, Barwon Health
> Lucy Cuddiny, Barwon Health
> Ian Trezise, MP
> Paul Younis, CEO, Corangamite Shire Council
> Toni Hancock, CEO, South West LLEN
> Leigh Bartlett, Cluster Coordinator, Barwon Regional Youth Advisory Network

Location: Melton
Host: Victoria University
Date: Wednesday, 19 August, 2009
>
> Professor Elizabeth Harman, Vice-Chancellor, Victoria University
> Claire Brown, Senior Advisor, Office of the Vice-Chancellor, Victoria University
> Neville Smith, CEO, Melton Shire Council
> Geoff Ryan, Principal, Westbourne Grammar
> Lionel Newman, Director, Workforce Planning, Government Relations, Victoria University
> Sharon Winocur, Executive Director, Business Higher Education Roundtable Table (BHERT)
> Anton Mayer, CEO, LeadWest
> Professor Wayne Robinson (Deputy Vice-Chancellor, Higher Education), University of Ballarat
> Sheila Fitzgerald, Director Strategic Development, Swinburne TAFE
> Professor Margaret Mazzolini, Pro Vice-Chancellor (Learning & Teaching), Swinburne University
> Professor Marnie Hughes-Warrington, Pro Vice-Chancellor (Learning and Teaching), Monash University
> Colleen Bergin, Chair, Melton Education Steering Committee
> Peter Harrison, General Manager, Knowledge and Information Management, Kangan Batman Institute of TAFE
> Peter Blundon, Lifelong Learning, Melton Shire Council
> Associate Professor Tony Kruger, Head of School of Education, Victoria University
> Greg Haines, Project Director, Western Corridor Feasibility, University of Ballarat
> Don Nardella, MP
> Professor Terry Lloyd, [Deputy Vice-Chancellor, TAFE], University of Ballarat
> Andrew Rimington, Senior Manager, Employment, Education & Training, Victorian Employers’ Chamber of Commerce and Industry (VECCI)

Location: Churchill
Host: Monash University
Date: Wednesday, 26 August, 2009
> Professor Helen Bartlett, Pro Vice Chancellor, Gippsland, Monash University
> Paul Buckley, CEO, Latrobe City Council
> Bernadette O’Connor, CEO, Education Centre Gippsland
> Loretta Hambly, Executive Officer, Gippsland Education Precinct
> Ben Leigh, CEO, Latrobe Community Health
> Angela Hutson, CEO East Gippsland Institute of TAFE
> Peter Whitley, CEO, Central Gippsland Institute of TAFE
> Brad Shaw, GippsTAFE
> Annabel Barbara, Executive Officer, Gippsland Regional Development Strategy
> Michelle Reid-Metcalf, Assistant Principal, Kurnai College
> Wes Palmer, Mirboo North Secondary School
> Michonne Van Rees, Regional Director, Gippsland Regional Office, DEECD
> Annabel Barbara, Executive Officer, Gippsland Regional Development Strategy
> Danielle Auldist, Executive Officer, GippsDairy
> Christopher Lord, Regional Manager, Victorian Business Centre - Gippsland Region

Location: Melbourne CBD
Host: Department of Innovation, Industry and Regional Development
Date: Wednesday, 26 August, 2009
> Professor Adam Shoemaker, Deputy Vice-Chancellor Education, Monash University
> Professor Sally Walker, Vice-Chancellor, Deakin University
> Professor Ian Young, Vice-Chancellor, Swinburne University
Location: Bendigo
Host: Bendigo Senior Secondary College
Date: Wednesday, 26 August, 2009

> Professor Hal Swerissen, Pro Vice-Chancellor [Regional], La Trobe University
> Andrew Skewes, Executive Director, Bendigo Campus, La Trobe University
> Paul Caulpin, CEO, Goulburn Ovens Institute of TAFE
> Doug Ivins, Training Activity Manager, Bendigo Regional Institute of TAFE
> Jim Dannock Regional Manager, Australian Industry Group
> Craig Niemann, CEO, City of Greater Bendigo
> Phil Pearce, CEO, City of Greater Shepparton
> Derek de Vrieze, Director, Bendigo Business Council
> Dale Pearce, Principal, Bendigo Senior Secondary College
> Meredith Fettling, Assistant Principal, Bendigo Senior Secondary College
> Mark Zulian, Careers and Pathways Coordinator, Bendigo Senior Secondary College
> Stephen Brain, Pathways and Transitions Manager, Bendigo Senior Secondary College
> Rosalie Lake, Vocational Learning Manager, Bendigo Senior Secondary College
> Paul Seery, VCE and Special Programs Manager, Bendigo Senior Secondary College
> Jarryd Redwood, Student, Bendigo Senior Secondary College
> Melanie Rosier, Student, Bendigo Senior Secondary College
> Noah Taylor, Student, Bendigo Senior Secondary College
> Caitlyn Anderson, Student, Bendigo Senior Secondary College
> Jaymie Vear, Student, Bendigo Senior Secondary College
> Edwin Spark, Student, Bendigo Senior Secondary College
> Darren McGregor, Principal, Catholic College Bendigo
> Eli Geary, Student, Catholic College Bendigo
> Anthea Gomez, Student, Catholic College Bendigo
> Les Evans, Senior Master, Girton Grammar School
> Tharanya Mohanathas, Student, Girton Grammar School
> Samuel Walter, Student, Girton Grammar School
> Chris Bromley, Career Advisor, Kynton Secondary College
> Michael Farnsworth, Student, Kynton Secondary College
> Lauren Monaghan, Student, Kynton Secondary College
> Scott Burton, Mooroopna Secondary College
> Caitlyn Cormick, Student, Mooroopna Secondary College
> Mason Argus, student, Mooroopna Secondary College
> Andrew Whatley, Principal, Spring Gully Primary School
> Chris Barker, Assistant Principal, Camp Hill Primary School

Location: Mildura  
Host: Sunraysia TAFE  
Date: Friday, 18 September 2009, 2009

> Dennis Norton, Principal, Mildura Senior College
> John Hiskins, Centre Leader, Mildura & Mallee, Department Primary Industries
> Marian Luehmann, CEO, Sunraysia Residential Services, Mildura Development Corporation
> Helena Howe, Economic Development Project Officer, Mildura Development Corporation
> Darren Atkinson, Principal, St Joseph’s College
> Angela Hutson, CEO, East Gippsland Institute of TAFE
> Kent Farrell, Executive Director, La Trobe University
> Dr John Cooke, Southern Irrigation Region, La Trobe University Regional Advisory Board
> Ian Westhead, Business Manager, Sunraysia Institute of TAFE
> Michael Schooneveldt, Sunraysia Institute of TAFE
> Ray Cadmore, Pathways Project Co-ordinator, Sunraysia Institute of TAFE
> Janice Kelly, Board Director, Sunraysia Institute of TAFE
> Kassie Hocking, Planning & Reporting Co-ordinator, Board Director, Sunraysia Institute of TAFE
> Jenny Grigg, Director: Business Development, Sunraysia Institute of TAFE
> Tracey Forbes, Director, Education, Sunraysia Institute of TAFE
> Wendy Thomson, Board President, Sunraysia Institute of TAFE
APPENDIX 3

THE GROWTH OF HIGHER EDUCATION IN AUSTRALIA

Within sixty-five years of white settlement at Botany Bay, two institutions of higher education had been established, one in Sydney and the other in Melbourne. The University of Sydney was founded in 1851 and admitted its first students the following year. In 1853, the University of Melbourne was founded as a direct result of the wealth generated by the gold rush; it began teaching in 1855. By way of comparison, there were at this time four established universities in England, four in Scotland and one in Ireland.\(^{158}\)

By the time of the outbreak of World War II, the Australian higher education sector comprised six universities, one in each capital city, and two university colleges with a total enrolment of 14,236 students, of whom 8,240 were enrolled at the universities of Sydney and Melbourne.\(^{159}\)

The immediate post-war period saw the first wave of growth in Australian higher education, which resulted from the Australian Government funding of returned servicemen’s and women’s fees and living allowances; the population bulge of the 1940s and ’50s; and rising expectations resulting from better educated young people and increases in school retention rates.\(^{160}\) During this period, enrolments in universities more than doubled compared to numbers at the beginning of the war – from 14,236 in 1939 to 30,630 by 1950.\(^{161}\) Many new institutions of higher education were created, including the Australian National University in Canberra, and many existing institutions were expanded.

In each of the years 1958, 1959 and 1960 there was an increase in enrolments in universities of over 13 per cent. In Victoria, Monash University was established in 1958 and began teaching, with its first intake of 347 students, in Clayton in 1961.

During the decade 1956–66, the second wave of the growth of higher education in Australia saw the number of Australian universities expand from nine to fourteen and the student population in universities treble.\(^{162}\) Prime Minister Robert Menzies then took the education portfolio and, following the Martin Report, the establishment of a binary higher education system was announced, which comprised the existing universities plus five new ones (including three in metropolitan Melbourne) and Colleges of Advanced Education [CAEs]. Both types of institutions were able to award degrees, but college courses were intended to be more vocationally specific. TAFEs provided technical and further education.\(^{163}\)

The third wave of growth occurred in the decade following the abolition of tertiary fees by the Whitlam Government in 1974; total student numbers grew from 100,000 in 1968 to 159,600 in 1978, an increase of 59% and, by 1973, there were nineteen universities in Australia.

The CAEs were originally designed to fill the gap between universities and TAFE and to concentrate on sub-degree courses based on vocational skills, but with the rising expectations of staff and students their role changed and by the late 1970s, the larger CAEs especially closely resembled universities in many respects. Nationally, almost 70% of all CAE students were enrolled in bachelor degrees and postgraduate courses. The total number of CAE students increased by 242% between 1968 and 1978, with an increase of 18.7% in 1973 alone.\(^{164}\) In the decade leading to the late 1980s, school retention rates to year 12 doubled and demand for tertiary education continued to rise.

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158 National Report, p. 4.
161 Ibid, pp. 10-12.
162 Ibid, pp. 10-12.
The reforms initiated in 1987 by John Dawkins in response to rising demand and the Hawke Government’s major thrust of economic reconstruction, restructured Australian higher education abolishing the binary system and merging many of the CAEs with universities. In Victoria, for example, the University of Melbourne merged with the Melbourne College of Advanced Education and the Victorian College of Agriculture and Horticulture, broadening its curriculum and research base. TAFEs continued to teach vocational and preparatory courses to advanced diploma level.

The Dawkins reforms also included substantial increases in the provision of student places and various efforts to increase the output of graduates; an increased emphasis on fields such as applied science, technologies, computer science and business studies – which were perceived to be of crucial importance for economic recovery and growth; and allocating some of the financial burden for higher education to individuals and the private sector and encouraging institutions to generate some of their own income.

The Higher Education Contribution Scheme (HECS) was introduced in 1989 following a funding review. The HECS scheme, described by James (2007) as ‘a powerful equity device’, was a move to a user pays principle, but it allowed students to defer paying their contributions through income contingent loans with low rates of interest.

During the two decades from 1987, the total number of higher education enrolments in Australia more than doubled from around 394,000 in 1987 (including students in Colleges of Advanced Education) to over 638,000 in 1996 and around 1.03 million in 2007. The number included a significant growth in international students studying here and at offshore campuses of Australian universities.

In 2003 the Crossroads Review, initiated by the Education Minister, Dr Brendan Nelson, partially deregulated the higher education system and introduced performance-based incentives. These measures were intended to create a competitive and diverse environment by enabling universities to capitalise on their particular strengths and determine the value of their course offerings. There was renewed emphasis on learning and teaching outcomes, greater recognition of the role of regional campuses and institutions and a framework for research in which all Australian Government funding was either competitive or performance-based. The HECS system continued to allow eligible students to defer their fees; there was support for greater access for disadvantaged groups; and the market for private higher education was opened up.

There is international agreement that a nation’s higher education system is crucial to its economic and social wellbeing. The 2008 Bradley Review established that the Australian higher education sector is losing ground against a number of competitor countries on a range of indicators and that significant institutional reform is required with an emphasis on a more ‘holistic approach to planning and provision’.

Bradley has set the scene for the fourth major wave of growth in Australian higher education.
APPENDIX 4

VICTORIA’S UNIVERSITIES

The following information about Victoria’s universities has been obtained from their websites and from the Good Universities Guide 2010.

Australian Catholic University

The institutions that merged to form the Australian Catholic University (ACU) in 1991 had their origins in the mid-1800s, when religious orders and institutes became involved in preparing teachers for Catholic schools and nurses for Catholic hospitals. Through a series of amalgamations, relocations and diocesan initiatives, more than twenty historical entities contributed to the creation of the University.

The University’s constitution identifies education, scholarship and research as part of the mission of the Catholic Church and it explicitly engages the social, ethical and religious dimensions of the questions it faces in teaching, research and service.

ACU has campuses in Brisbane, North Sydney, Strathfield, Canberra, Ballarat and Melbourne.

The Ballarat Campus had its beginnings in the establishment of the Aquinas Training College by the Ballarat East Sisters of Mercy in 1909. It continued in various guises until it became the Institute of Catholic Education. While initially the Institute was concerned predominantly with the preparation of primary teachers for Catholic schools, by 1980 it had accredited courses concerned with post-primary education, nursing, religious education, church music, educational administration, guidance and welfare, educational studies and multicultural studies. At the end of 1990 the Institute formally handed responsibility for the Institute and its operations to ACU. Programs currently include education, nursing, paramedicine and theology.

The Melbourne Campus at Fitzroy was established in 2000 after ACU’s existing two Melbourne campuses were formally amalgamated. Mercy and Christ had both been colleges of the Victorian Institute of Catholic Education between 1975 and 1990. Programs currently include arts, business, business information systems, education, exercise science, midwifery, nursing, music, psychology, religious education, social science, theology and youth work.

University of Ballarat

The University of Ballarat was founded in 1994, but is located on the third oldest site of tertiary education in Australia. Its history begins with the foundation of the School of Mines and Industries in 1870. In 1926 the Ballarat Teachers College was established (although it closed temporarily because of the Depression). The Ballarat College of Advanced Education was formed in 1975 and the teacher education students moved to the Mount Helen campus. In 1998, the University was merged with the School of Mines and Industries Ballarat and with the Wimmera Institute of TAFE.

The University of Ballarat is a regional, multi-sector, comprehensive university with provision for secondary schooling, TAFE, higher education, further education and research students. It services communities in Central and Western Victoria, as well as other students nationally and internationally.

The University has 25,000 students including 7,500 international students. It draws its 17,500 domestic students from a broad area of regional Victoria including Ballarat, Ararat, Stawell, Horsham, Nhill, Hamilton, Maryborough, Warrnambool, Portland, Bacchus Marsh, Bendigo, Mildura and Swan Hill. All of these communities have significantly lower participation rates in post-secondary education than the national average.
Ballarat has recently extended its Regional Education Entry Program – which was designed to increase the participation rates of students from regional areas – to include all of rural Victoria and selected interstate and outer-metropolitan schools. The program enables students to get an early offer using alternative entry criteria. The University also offers a one-semester preparation program for those who do not meet the standard entry requirements. As a dual-sector institution the University of Ballarat focuses on the articulation of students from TAFE to higher education; in many areas students can articulate directly from a TAFE diploma into the third year of a relevant degree.

The University has the highest proportion of regional students (72 per cent) as a percentage of its Commonwealth-supported places of any university in Victoria and of all regional universities in Australia. Approximately three in every four of its undergraduate Commonwealth-supported students find their first employment in regional and rural areas following graduation.

The University is the first in Australia to provide students with the option of completing an undergraduate degree program within TAFE with a Commonwealth-supported Place (CSP). It is the only regional university in Australia to achieve a top 10 rating from the Australian Government’s Learning and Teaching Performance Scheme in 2005, 2006 and 2007, and it is the only regional university in Australia with its own technology park, ecology park and an art academy for TAFE and higher education students.

According to data supplied by Graduate Careers Australia to the Good Universities Guide 2010, the University of Ballarat earns good overall satisfaction ratings and excellent teaching ratings.

The University has campuses in:

- Ararat – providing pathways for secondary college students into TAFE programs and opportunities for higher education programs. It runs courses in computing, business studies, electronics, further education, social and community studies and engineering.

- Horsham – delivering training throughout the Wimmera. Programs include business studies, computing, further education, industrial studies, hospitality, rural studies, vocational arts and health, social and community services and some higher education units.

- Mount Helen campus – located 10 km from the centre of Ballarat. Facilities include an indoor aquatic centre and a range of other sporting and leisure facilities. Fifty specialised areas of study are available through seven schools, including behavioural and social sciences, humanities, business, education, human movement and sport sciences, information technology and mathematical sciences, nursing, science and engineering.

- SMB campus – located in the heart of Ballarat, the campus includes a Brewery Complex. Programs include applied science, building studies, business studies, hospitality, further education, manufacturing and technology, health, social and community studies, hair and beauty, physical recreation, rural studies and vocational arts.

- Camp Street Campus – this is the main site for the arts academy and creative arts education training for TAFE and higher education and includes studios, labs and multimedia facilities, performance spaces, including a 150-seat theatre, a residential complex, a professional gallery and exhibition spaces.
Deakin University

Deakin University, named after former Prime Minister Alfred Deakin, was established in 1974 as a regional university incorporating two existing Geelong-based institutions, the Geelong State College and the Gordon Institute of Technology. Teaching began in 1977 with 2,500 students. In 1990 the University was amalgamated with the Warrnambool Institute of Advanced Education and in 1991 with Victoria College in Burwood. The Waterfront campus in Geelong was opened in 1996.

In 1991, Deakin’s Institute of Koorie Education was opened which provides community-based learning model that provides a holistic approach to education through a combination of both on and off-campus teaching, designed to enable Indigenous students to study without being removed from their communities for substantial periods of time. In 2007, Deakin had the highest number of Indigenous students of any Victorian higher education provider.

Deakin has over 34,000 higher education students: more than 10,000 study off campus; more than 7,000 are international students from over 100 different countries; 21 per cent study at regional campuses in Geelong and Warrnambool; 35 per cent study part-time. Of Deakin’s domestic students, 22 per cent are from regional or remote areas; 13 per cent come from a low socio-economic status background; 2 per cent are from a non-English speaking background; and nearly 2 per cent are Indigenous.

Deakin is well-known for its flexible delivery models, particularly off-campus and online learning and it has set the benchmark for the new technologies and materials used for off-campus delivery. Its new Deakin at Your Doorstep project will deliver a two-year associate degree course providing an accessible pathway to higher education for students in rural and regional areas. The course will be delivered, through partnerships with TAFEs, from the Warrnambool campus. The University has also recently introduced a 12-week trimester system. Study in the third trimester is not compulsory and a full-time load will continue to be two semesters, but a student may fast-track their degree by studying for three trimesters a year if they wish.

Deakin offers special consideration for entry to students who apply through their Access and Equity Program. It offers special programs to Aboriginal and Torres Strait Islander students in a range of courses, support programs for students from non-English speaking backgrounds and have credit transfer options for students articulating from TAFE, Open Universities Australia or other institutions in Deakin’s advanced-standing database.

The University has twice won the Australian University of the Year award and in the 2007 Carrick Awards (now the Australian Learning and Teaching Council Awards) was commended with nine citations for Outstanding Contributions to Student Learning.

The University has campuses in:

> Burwood – located in Melbourne’s eastern suburbs, the campus caters for 13,000 undergraduate and postgraduate students. Areas of study include arts, business and management, communications and media, environment, health and community services, information technology, law, nursing, nutrition, psychology, science, sport, teaching, visual, performing and creative arts. The campus also provides accommodation for 200 students.

> Waurn Ponds – located on the western edge of Geelong, the campus caters for more than 4,000 on-campus students. In 2008, a new 4-year Bachelor of Medicine/Bachelor of Surgery course was introduced with an emphasis on training medical students who are motivated to work in rural and regional areas. The campus is also the location of the Geelong Technology Precinct which provides research and development capabilities and opportunities for university/industry partnerships and new enterprises in the region. Areas of study also include arts, business and
management, communications and media, engineering, health and community services, information technology, law, nursing, psychology, science and teaching. The campus provides accommodation for 447 students.

> Waterfront – located on the foreshore of Corio Bay in Geelong the campus is the base for 1,200 students. The Dennys Lascelles Building is currently undergoing a $37 million redevelopment, which will allow the University to provide an expanded range of courses. Included in the new development will be an interdisciplinary teaching and research centre covering political science, public policy and governance, international relations, globalisation, journalism and communications. Other areas of study include architecture and construction management, nursing, occupational therapy and social work.

> Warrnambool – located 188 kilometres from Geelong and 264 kilometres from Melbourne, the campus has a population of around 1,200. Its proximity to a range of marine and freshwater aquatic environments enables specialist studies in aquaculture and marine biology. Other areas of study include arts, business and management, communication and media, environment, health and community services, law, nursing, psychology, teaching, tourism management and hospitality. The campus provides accommodation for 240 students.

The University of Melbourne

The University of Melbourne was founded very early in the history of the colony of Victoria, less than 20 years after Batman and Fawkner arrived and less than two years after the discovery of gold. The University was established in 1853; classes started in 1855 with four professors and 16 male students; women were admitted in 1881. In the 1980s and ’90s, the University amalgamated with the Melbourne College of Advanced Education, the Hawthorn Institute of Education and the Victorian College of Agriculture and Horticulture.

In 2008, the University introduced the ‘Melbourne Model’ replacing 96 traditional degree courses with six ‘new-generation’ undergraduate degrees focusing on academic breadth and depth. The University currently has more than 44,500 students including 11,000 international students from 115 countries. In 2008, the median ENTER of its domestic students was 93.9.

Access Melbourne is a special entry and scholarship scheme for students whose circumstances may have affected their chance of getting a place at the university. There are also alternative entry arrangements for mature age students and an arts degree extended to four rather than three years for aspiring Indigenous students who do not achieve direct entry.

The University has twice received grants from the Australian Government’s Learning and Teaching Performance Fund for Australian universities that demonstrate excellence in undergraduate teaching and learning. It was also one of only three Australian universities to win ten citations under the Carrick Citations for Outstanding Contributions to Student Learning. The citations recognise commitment by staff who have shown outstanding leadership and innovation in teaching and dedication and enthusiasm for student learning.

The University of Melbourne is Australia’s number one research university according to key indicators used by the Australian Government to allocate competitive funding, and it is the second-largest research organisation in Australia after the CSIRO (Commonwealth Scientific and Industrial Research Organisation).

The University’s main campus is in Parkville and it has campuses at Werribee [the Veterinary Clinical Centre, opened in 1966, which provides clinical instruction to third and fourth-year undergraduate students and veterinary services to the community]; Creswick [location].
Monash University

Named after prominent Australian Sir John Monash, the University was established in 1958 and began teaching in 1961 with 347 students. It grew so rapidly that by 1967 students numbered 7,000.

In 1990, Monash merged with the Chisholm Institute of Technology, creating the University’s Caulfield and Peninsula campuses; in 1991 the campus at Gippsland was established; the following year the Victorian College of Pharmacy joined Monash University as the Parkville campus; the Berwick campus was added in 1994 with the growth of Melbourne’s south-eastern corridor; Monash University Malaysia was set up in 1998; and South Africa in 2001. Monash now has a network of campuses around the world with more than 55,000 students from more than 130 countries.

The University’s Special Admission Scheme aims to improve the participation of prospective students from disadvantaged SES backgrounds, rural or isolated areas, an Aboriginal or Torres Strait Islander or non-English speaking background, difficult family circumstances, illness or disability. The University has also been trialling the use of GAT scores to select students whose VCE results are just below the cut-off.

Monash’s new Passport Program, and a recent agreement with Oxfam will provide further opportunities to foster community and international engagement through student exchanges, internships, leadership training and volunteer programs.

The University’s domestic campuses:

> Clayton – this is Monash’s original campus located 20 kilometres south east of Melbourne. The campus caters for 24,000 students studying in eight faculties: arts, business and economics, education, engineering, information technology, law, medicine, nursing and health sciences and science.

> Gippsland – located in Churchill, Victoria, 160 kilometres south-east of Melbourne, the Gippsland campus is home to 2,000 on-campus students, 5,000 off-campus students and nearly 400 staff. Courses on offer include science [medical bioscience and biotechnology], nursing practice, business and commerce, journalism, primary education, arts [criminal justice], civil and environmental engineering, information and technology systems, psychology and business, sports promotion and event management and visual and media arts. A number of associate degree programs are on offer and a diploma of tertiary studies [minimum ENTER of 50] plus distance education programs. The campus has more than 300 fully-furnished units available for on-campus living.

> Berwick – this is the only university campus currently located in Melbourne’s outer south-east growth corridor. Established in 1996, the campus is located in a region which includes the Cities of Casey and Greater Dandenong, the Shires of Cardinia and Mornington Peninsula and parts of western Gippsland, which has significant pockets of educational disadvantage, low socioeconomic status and low aspiration for higher education. Courses include a diploma in tertiary studies plus single and double degrees in communications, information technology and systems, and business and commerce.
Caulfield – originally opened in 1922 as the Caulfield Technical School offering courses in carpentry and blacksmithing. Caulfield is now Monash’s second largest campus with 14,000 students, of which 9.3 per cent study off campus and 35.5 per cent are international. The campus offers undergraduate and postgraduate courses in arts, art and design, business and economics, information technology, medicine, nursing and health services.

Parkville – located on Royal Parade in Melbourne, the campus is home to the Faculty of Pharmacy and Pharmaceutical Sciences and has undergone a $45 million redevelopment in the last two years. The Faculty runs two undergraduate programs, four postgraduate coursework and two higher degree by research courses for 1,100 students.

Peninsula – originally a teachers’ college at Frankston, the Peninsula campus has more than 3,000 students with a teaching, research and community focus on health and wellbeing. Courses are available to undergraduates and postgraduates and include subjects in business and economics, education, health sciences and nursing.

RMIT University

In 2007, RMIT University celebrated 120 years since its doors opened in 1887 as a the Working Men’s College. From the boom of the 1880s through periods of war, depression and renewed prosperity during the latter half of the twentieth century, the University has seen many changes. Since the 1990s, the institution has acquired campuses in Bundoora and Brunswick, in the city’s northern suburbs, and in Ho Chi Minh City and Hanoi in Vietnam. Now there are more than 60,000 students studying at RMIT campuses in Melbourne and regional Victoria, in Vietnam, online, by distance education and at partner institutions throughout the world.

Thirty-five per cent of RMIT’s students are international, 67 per cent higher education and 33 per cent TAFE students. The largest percentage of students (23.6 per cent) study management and commerce with the second largest percentage (10.6 per cent) studying engineering and related technologies.

The University has special entry access schemes for Aboriginal and Torres Strait Islander applicants, students with disabilities, mature age students, refugees and students who have experienced disadvantage during their schooling. The Schools Network Access Program allows for applications from disadvantaged students from participating schools across Victoria to be assessed on the basis of an applicant statement and teacher report and recommendations.

RMIT offers a number of distance learning courses – mainly Graduate Diplomas and Certificates – in a range of subjects and it has a partnership with Open Universities Australia through which it offers a range of bachelor and master degrees and a juris doctor program, with 3.7 per cent of its students studying off-campus.

The university has strong relationships with industry and focuses on work-integrated learning with work placements and practical experience embedded into most of its courses. RMIT also offers students a ‘global passport’ to learning and work through overseas study opportunities, including through its Vietnam campuses.

The University’s domestic campuses:

> City – a wide range of TAFE, undergraduate and postgraduate programs and short courses are offered at the city campus as well as an accredited foundation studies program that prepares students for university-level study. Sixty-two per cent of the University’s students study at the city campus.
Bundoora – located 18 kilometres north-east of Melbourne, the campus offers specialist programs in nursing, science, education, Chinese medicine and sport and caters for 9 per cent of the University’s students.

Brunswick – located 5 kilometres north of Melbourne city centre and catering for 3.9 per cent of the University’s students, this campus offers programs in fashion, textiles, electronic publishing and printing, TAFE apprenticeships and traineeships and undergraduate and postgraduate courses in a range of subjects including art and design, manufacturing and processing, computing and information technology, education, science and mathematics.

Point Cook – located 20 kilometres south-west of the centre of Melbourne at the site of the world’s first military air base, the University’s flight training programs, spanning diploma to postgraduate level, are conducted at Point Cook Airfield.

Hamilton - situated approximately 4 kilometres from the centre of Hamilton in the Southern Grampians Shire, the campus includes a clinical learning environment. It runs short courses, undergraduate, postgraduate and research programs including a Bachelor of Nursing and courses in economic development and education. Vocational courses are available to certificate level in workplace training and assessment and real estate practice and the campus provides professional development for educators and courses customised for the workplace.

Swinburne University

From its establishment as a tertiary institution in 1908 in Melbourne’s eastern suburb of Hawthorn, Swinburne has grown from being a local provider of technical education for plumbers and carpenters into a multi-disciplined, multi-campus provider of higher education proclaimed in 1992 as Swinburne University of Technology.

Swinburne runs an extensive range of programs for school leavers from pre-apprenticeships through to PhDs. The University provides students with a number of well-defined ‘pathways’ allowing them to move from TAFE-based VCE studies into full TAFE courses, between TAFE and higher education and from degree courses into TAFE studies. There are several categories for special entry covering prospective students who are from non-English speaking or low SES status backgrounds; disabled; from rural or isolated areas; and women enrolling in non-traditional areas. Bridging courses are available to boost maths and language skills.

Many Swinburne undergraduate courses emphasise ‘real-world’ learning and have an applied vocational emphasis and direct industry application through Industry Based Learning programs. Over the last few years, the University has extended the vocational emphasis of its undergraduate programs by introducing an inter-curricular Professional Learning Model which integrates into the curriculum opportunities for industry and project-based learning, general elective sequences to diversify students’ skills, opportunities for international study and career management classes. All final-year students complete a Capstone Project, which is intended to provide real-world authentic challenges and an Electives Plus sequence allows students from all disciplines to broaden their knowledge into areas such as sustainability or establishing and running a business.

As well as a campus in Sarawak, Malaysia, the University has domestic campuses in:

Croydon – located in the foothills of Mount Dandenong, the campus offers TAFE programs in the areas of social sciences, business, community services, children’s services, computing, building, recreation and a large variety of short courses. There is a particular focus on youth and the campus offers the Victorian Certificate
of Applied Learning (VCAL), VCE and VET in the VCE programs, a range of apprenticeships and 'First Stop', which is a free service that provides personalised assistance to help young people and/or their parents make decisions about further education, training and employment options. International projects management and English language training are also available at the Croydon campus.

Hawthorn – located seven kilometres east of the city of Melbourne, the campus has undergone a major redevelopment in recent years. It is home to the University’s central administration, many of its undergraduate and postgraduate programs, TAFE courses and short courses.

Healesville – this small campus has been part of the local community for the last 17 years. It offers a flexible delivery approach to study for both young and mature age students. Accredited programs currently being offered include courses to develop return to work skills, as well as personal interest courses. Short courses, workshops and seminars on various subjects are also on offer.

Lilydale – located in a scenic 24-hectare rural setting with views across the Lilydale Lake to the Yarra Valley hills, the campus offers TAFE, undergraduate and postgraduate courses including business, communications, psychology, technology, tourism and writing.

Prahran – known as Swinburne’s ‘arts campus’, Prahran houses a number of arts areas including the National Institute of Circus Arts and the Faculty of Design, which offers a range of graphic, industrial, interior/exhibition and multimedia design courses at undergraduate and postgraduate level. At the TAFE level, it also has graphic design, multimedia design, costume, performing arts and makeup courses.

Wantirna – just off the Burwood Highway in Melbourne’s eastern suburbs, Wantirna is Swinburne’s ‘green’ campus, with extensive horticulture facilities and a planned specialist sustainability building. Courses offered range from apprenticeships to diploma and certificate courses in the area of art and design, automotive, business and management, computing and information technology, engineering and electrical, horticulture and health and human services.

La Trobe University

In 1967, 552 students enrolled at La Trobe University, the third university to open in Victoria. Now it caters for more than 26,000 students including around 3,500 international students from more than 90 countries. The University has a network of campuses with 15,000 students at Bundoora and over 7,000 at regional campuses.

La Trobe is broadening the student experience in a number of ways including building up its use of supporting learning technologies; industry-based and field learning and cadetships; overseas exchange mobility grants; community volunteering opportunities; leadership training; and mentoring programs.

The University has recently extended its arrangements with local TAFEs at several regional campuses. There are special entry pathways for school leavers and adults who don’t meet minimum requirements and bonus points for school leavers living in and around regional campuses. La Trobe also has a guaranteed entry scheme that offers automatic acceptance into more than 40 degree courses for year 12 students who meet certain course and score prerequisites.

Recently La Trobe launched a five-year dentistry course at the Bendigo campus and a major in sustainable resource management in the business degree at Albury-Wodonga. A major Biosciences Research Centre is expected to be fully operational at Bundoora in 2012.
The University has campuses in:

- **Bundoora** – located 14 kilometres from Melbourne’s city centre, the campus is set on 330 hectares of bushland. Five faculties are represented at Bundoora and students can choose from more than 300 undergraduate and/or postgraduate courses in humanities, law, management, education, science, engineering, technology, health and social sciences. The campus has strong connections with industry and is able to offer a wide variety of work placements, internships and other types of industry experience with many courses, some of which are overseas.

- **Bendigo** – the University’s second largest campus catering to more than 4,000 local and international students is set in 33 hectares of native bushland only 3 kilometres from the centre of Bendigo, approximately two hours drive from Melbourne. The campus has a TAFE pathways agreement with Bendigo Regional Institute of TAFE and provides courses for undergraduate, postgraduate and international students with key strengths in health sciences, education and visual arts.

- **Albury-Wodonga** – situated in 26 hectares of bushland just 3 kilometres from Wodonga, the campus offers undergraduate and postgraduate courses with several courses unique to the campus. Courses are designed to meet the needs of professions that are in demand both regionally and nationally. With around 1,100 students, the campus is home to significant research expertise in areas such as freshwater ecology, resource management and issues around ageing in regional communities. Study credit agreements exist with TAFE institutes near to the campus.

- **Beechworth** – La Trobe at Beechworth is a multi-purpose function and accommodation centre.

- **Mildura** – located in the centre of Mildura, in the north west of Victoria, the campus caters to over 330 students providing undergraduate and postgraduate courses in education, accounting, social work, arts, visual arts, graphic design and business. The campus also offers a range of short courses including customised courses for local organisations and a number of free short courses available every year for members of the local community.

- **Melbourne City** – located in the heart of the CBD, the City campus provides facilities for a number of postgraduate Health Sciences and Law and Management courses and is home to several research centres. A range of short courses and single subjects may also be studied there.

- **Shepparton** – located in the centre of Shepparton, 180 kilometres north of Melbourne in the Goulburn Valley. Courses are available at diploma, bachelor, graduate diploma and master levels from the faculties of education, health sciences, law and management, and humanities and social sciences.
Victoria University

Victoria University was established in 1992, from predecessor institutions dating back to the Footscray Technical School founded in 1916. It is one of only five multi-sector universities in Australia offering TAFE and higher education courses.

The University’s original mandate was to serve the western region of Melbourne and it has established strong links with local communities, government and industry. The University has a total student body of more than 47,000 with nearly 12,000 international students. Nearly half of the University’s students are from non-English speaking backgrounds and it is well-known for its cultural diversity, its work with newly-arrived migrants and extensive community outreach programs in the western suburbs.

Footscray Park, the University’s largest campus, which is home to almost half the University’s total student population, is currently undergoing a major $62.5 million redevelopment which will create 1,300 learning spaces. Among a range of initiatives the University has recently introduced a 25 per cent workplace component target for all courses.

The University is relatively accessible with entry requirements generally at or below the average. Its pathways approach and entry requirements provide flexibility and open up access in many areas. Its Portfolio Partnership Program is an alternative entry scheme available to students in participating schools in the western metropolitan and north western outer urban regions. The University also runs a number of bridging programs which can provide credit toward degrees.

The University has campuses in:

> City Flinders – overlooking the Yarra River in the centre of Melbourne the campus is home to the University’s multimedia courses, postgraduate business courses and a conference centre.

> City King – located on King Street in the centre of Melbourne, close to Southern Cross Station, this campus provides training for a range of industries including hairdressing, health and beauty, office administration and retail.

> City Queen – on Queen Street in the centre of Melbourne, the campus houses the University’s School of Law, the Law Library, The Sir Zelman Cowen Centre for Continuing Legal Education and Victoria University’s Judicial Administration and Justice Studies Institute. The building also contains two moot courts, computer laboratories, lecture theatres and seminar rooms. The campus is home to some of the University’s business and law activities, including postgraduate business programs, undergraduate law and continuing legal education.

> Footscray Nicholson – located in Footscray, the campus is situated in one of Melbourne’s most culturally diverse centres and provides facilities for an extensive range of TAFE programs.

> Footscray Park – located on a seven-hectare site next to the Maribyrnong River, the campus is the administrative centre of the University and the largest of all its campuses.

> Melton – while undergraduate programs are being gradually phased out at the Melton campus and its function within the Melton community is yet to be finalised, the campus will retain its affiliation with the University.

> Newport – this campus runs TAFE programs such as cabinet and furniture making and boat building.
> St Albans – located on a 32-hectare site, the campus consists of contemporary buildings encircling a large piazza. As well as arts and science programs, the campus has state-of-the-art research centres, including a sleep laboratory and a ‘wet lab’ for marine studies.

> Sunbury - while undergraduate programs are being gradually phased out at the Sunbury campus and its function within the Sunbury community is yet to be finalised, the campus will retain its affiliation with the University.

> Sunshine – situated in the centre of Sunshine, the campus hosts a broad range of business, trade and retail studies. It features two new building complexes and a convention centre.

> Werribee - situated in the Werribee technology precinct, the Werribee campus is a major contributor to the local scientific community. Spread over 16 hectares, it features specialised facilities for teaching and research including major research centres for the Faculty of Health Engineering and Science and a recently completed animal care and breeding facility.
APPENDIX 5

Maps showing the location of Victoria’s tertiary education institutions

FIGURE 7: MAP SHOWING REGIONAL UNIVERSITY CAMPUSES

FIGURE 8: MAP SHOWING METROPOLITAN UNIVERSITY CAMPUSES
FIGURE 9: MAP SHOWING METROPOLITAN AND OUTER URBAN TAFES

FIGURE 10: MAP SHOWING VICTORIAN TAFE CAMPUSES
APPENDIX 6

VICTORIA’S DIVERSE REGIONS

Melbourne’s outer urban fringe

Three of Melbourne’s outer urban, or interface, LGAs were among the three largest growing municipalities in Australia for the year ending 30 June 2008. These were Wyndham (up 7.2 per cent), Casey (3.5 per cent) and Melton (up 7 per cent).173

Casey, Hume and Melton are all interface municipalities, which together with Cardinia, Whittlesea, Mornington Peninsula, Nillumbik and Yarra Ranges make up an arc around Melbourne. With high population growth these LGAs are largely characterised by young families, and in particular young people. Typically in high growth areas such as these, there is a shortfall of infrastructure where services (including tertiary education provision) are not able to meet the demands of the growing local communities.

Young people across the interface municipalities attend post-secondary education at much lower rates than those living in metropolitan Melbourne. (Figure 11 below). Overall, 19.8 per cent of 15-24 year olds living in the interface areas attended university or TAFE institutions, compared to 33.5 per cent for metropolitan Melbourne. The Mornington Peninsula area has the lowest proportion attending post-secondary education.174

FIGURE 11: YOUNG PEOPLE (15-24 YEAR OLDS) FROM INTERFACE MUNICIPALITIES ATTENDING POST-SECONDARY EDUCATION, 2006.175

All the interface areas (with the exception of Nillumbik) show higher youth disengagement rates than metro Melbourne. Disengagement is defined as not being fully involved in either further education or full time employment. Those who do not remain fully engaged run the risk of long-term employment or of not developing the skills required that help with long-term engagement in the labour market.176

172 Interface refers to the fringes of Melbourne between the metropolitan area and rural Victoria. The nine municipalities which make up the interface area cover a population that has aspects of both urban and rural communities and are considerably larger than their neighbouring municipalities closer to the city. In each of the municipalities approximately 70 per cent of the population lives in about 30 per cent of the area. The interface municipalities cover an arc around Melbourne and comprise of the following LGAs: Cardinia Shire Council; City of Casey; City of Whittlesea; Hume City Council; Melton Shire Council; Mornington Peninsula Shire Council; Nillumbik Shire Council; Shire of Yarra Ranges; and, Wyndham City Council. The interface municipalities have high rates of population growth and are characterised by young families, and in particular young people, living in the concentration of urban areas as well as rural townships. Typically, in such high growth areas, there is a shortfall of infrastructure where services are not able to meet the demands of the growing community. (Access Economics, 2008, Staying Connected: A Cost Benefit Analysis of Early Intervention, report produced for the Interface Councils Group.)


175 Ibid, p. 9.


SOURCE: ABS CENSUS 2006, ACCESS ECONOMICS
Regional Victoria

Regional Victoria is by no means homogenous and it is worth undertaking a brief overview of the broad patterns and trends across geographic areas in order to build up a picture of the range of issues that relate to the provision of tertiary education in Victoria as a whole.

Employment has generally grown in regional Victoria, with 9 per cent growth between 2001 and 2006. However, much of this growth has occurred in cities and large towns and is related to public service providers, large-scale retailers and the construction industry.177

Modern economies tend to favour large cities where there are diverse economic and social environments and young people generally tend to favour the cosmopolitan nature of large cities like Melbourne, which provide not only education and job opportunities but also access to recreational, cultural and retail services. While regional cities with university campuses may offer local benefits in terms of research and development for local industry and the provision of education for local communities, and these cities have a higher retention of young people of university age, there is evidence that this delays migration to Melbourne rather than stopping it.178

While real median incomes have increased over the last two decades in both metropolitan and regional areas, median incomes in Melbourne are consistently higher than the rest of Victoria. Between 1981 and 2001, the gap grew with the median income of regional Victoria falling from 85 per cent to 73 per cent of the median for Melbourne households. In the five years to 2006, regional incomes increased to 76 per cent of metropolitan median income, but this was largely due to the movement of well-to-do households into regional areas close to Melbourne (e.g. the Surf Coast). While the municipalities of Central Goldfields, Loddon and Buloke show a high proportion of households in the lowest income quartiles, those closer to Melbourne such as Golden Plains and Macedon Ranges show much smaller proportions in the low income quartiles.179

It is expected that Victoria will become hotter and drier as a result of climate change, particularly in the north western parts of the State. One suggested outcome is the migration of people from the drier to the wetter parts of Victoria. In general, however, migration decisions tend to result in people moving short distances only in order to maintain social networks. Young people also tend to be more mobile than older people. Dry conditions also act as a disincentive for attracting people to regional areas.180

Projections for the Barwon region, which includes Geelong, Ocean Grove, Colac and Lara, show 1.3 per cent annual growth from 2006 to 2036. This is 1 per cent higher than for the rest of regional Victoria and is the result of migration from Melbourne and overseas migration.

The Western District, which includes Warrnambool, is projected to grow annually at a rate of 0.5 per cent which is less than the average for the rest of regional Victoria.

The Central Highlands, which includes Ballarat and Bacchus Marsh, is projected to grow at a rate of 1.2 per cent annually, while in the Wimmera region, which includes Horsham, the population is projected to decline at an average annual rate of -0.3 per cent and to age so that 19.6 per cent of the population is aged 75 and above by 2036, compared to the average for the rest of regional Victoria which is expected to be 15 per cent.

In the Mallee region, which includes Mildura, annual population growth of 0.1 per cent is projected, which would be less than the average for the rest of regional Victoria. Again, the population in the Mallee region is ageing, with 16.9 per cent expected to be 75 years old or above by 2036.

178 Ibid, p. 25.
179 Ibid.
In the Loddon region, including Bendigo, annual population growth of 1.3 per cent is expected. Areas in and around Bendigo and along the Bendigo-Melbourne corridor are popular locations for people moving out of Melbourne. The location of Bendigo enables greater retention of young people and the ageing trend is projected to be less than for regional Victoria as a whole.

The Goulburn region, including Shepparton and Echuca, is expected to grow by 1.1 per cent. This region also attracts people from Melbourne seeking a change of lifestyle and areas along the Murray River are popular with retirees. Southern parts of the region are also projected to experience strong growth due to metropolitan proximity.

The Ovens-Murray region, which includes Wodonga and Wangaratta, is projected to grow annually by 0.7 per cent. Wodonga is likely to attract future growth as a large service centre for the region and the adjacent NSW city of Albury adds to the attraction.

East Gippsland, which includes Sale and Bairnsdale, is expected to grow annually by 0.9 per cent. The proportion of the population aged 75 years and above is expected to be 16.7 per cent by 2036.

Lastly, the Gippsland region, including Traralgon, Morwell, Moe and Warragul, can expect the same growth rate as regional Victoria overall (1 per cent). The region’s proportion of the population aged 75 years and above (15.6 per cent) in 2036 is expected to be only slightly higher than the proportion for regional Victoria overall (15 per cent).

Significantly, however, McKenzie & Frieden (2009) argue that trying to forecast population growth with any degree of accuracy is notoriously difficult:

> perhaps more than ever, the future is likely to be affected by uncertainty. The risks and opportunities presented by such issues as climate change are ones for which historical trends are no longer adequate predictors for the future. In the face of such uncertainty, regional populations, economies and settlements will need to be adaptable and resilient.181

Trying to forecast the trends and needs in tertiary education in the regions is similarly fraught with difficulties and providers in these areas will also have to be responsive to changes, flexible and innovative in their management strategies.

## TABLE 11: THE DISTRIBUTION OF 2008 ENTERS BY REGION, SHOWING VICTORIAN REGIONS BY POSTCODE.

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</tbody>
</table>

**Victorian regions in terms of postcode:**

- **Barwon:** 3210-3256, 3321-3322, 3328-3333, 3352, 3360.
- **Central Highlands:** 3334, 3340-3351, 3353-3357, 3363-3370, 3373-3379, 3384, 3458-3461, 3467-3469.
- **East Gippsland:** 3847-3851, 3857-3867, 3873-3909, 3971.
- **Gippsland:** 3765-3775, 3779, 3787-3799, 3816-3845, 3852-3856, 3869-3872, 3921-3925, 3945-3946, 3979, 3984-3996.
- **Goulburn:** 3521-3522, 3559-3566, 3572, 3604-3673, 3710-3730, 3753, 3758, 3762-3764, 3777-3778.
- **Loddon:** 3371, 3430-3456, 3462-3465, 3472-3476, 3515-3520, 3523, 3535-3539, 3550-3558, 3570-3571, 3573-3576, 3751, 3756.
- **Mallee:** 3680-3485, 3490-3512, 3525-3533, 3540-3549, 3567-3568, 3578-3599.
- **Ovens-Murray:** 3675-3709, 3732-3749.
- **Western District:** 3260-3315, 3323-3325, 3361, 3406-3407.
- **Wimmera:** 3311-3319, 3380-3381, 3385-3402, 3409-3424, 3477-3478, 3487-3489.
- **Melbourne – City:** 3000-3008, 8001-8010, 8300, 8500.
- **Melbourne – NE suburbs:** 3101-3148.
- **Melbourne – SE suburbs:** 3149-3180.
- **Melbourne – outskirts:** 3335-3338, 3425, 3427-3429, 3750, 3752, 3754-3755, 3757, 3759-3761, 3781-3876, 3800-3815, 3910-3920, 3926-3944, 3973, 3975-3978, 3980-3983.
- **Melbourne – N suburbs:** 3039-3099, 8507, 8538.
- **Melbourne – S suburbs:** 3181-3209, 8865.
- **Melbourne – W suburbs:** 3010-3038.