3.1 Meeting Australia’s needs for people with high-level knowledge, skills and understandings

3.1.1 Assessing future demand for higher education

There is a complex range of factors impacting on future demand for skilled labour that need to be understood in forecasting future educational requirements. To better understand such needs, the panel commissioned Access Economics to assess the quantum and nature of demand for higher education over the next decade. Access Economics (2008) modelled both supply of graduates (student demand) and labour market demand for graduates. This model provided an estimate of the difference between demand and supply of graduates. The findings are summarised below.

Future demand for higher education: key findings by Access Economics

**Student supply** (student demand for higher education) is expected to grow at a faster rate over the next decade than demographic changes would suggest, reflecting:

- an expected increase in Year 12 retention rates over time;
- a related increase in real wages over time, which provides a greater return to employment; and
- a continuing margin in wages growth favouring higher education intensive occupations.

Growth is projected to be greatest for postgraduate students, increasing by an average of 1.4 per cent per annum over the next decade, compared with growth of 1.1 per cent per annum for undergraduate students, and 1.2 per cent per annum for advanced diploma students and diploma students.

**Demand for people with qualifications** is expected to be stronger than overall employment growth over the next decade. While overall employment growth is expected to be 1.6 per cent per annum, projected growth for people with postgraduate qualifications is expected to be 3.6 per cent per annum, 2.9 per cent for those with undergraduate qualifications and 1.8 per cent for diploma qualifications. The higher growth rates for postgraduate and undergraduate qualifications reflect both the expected composition of future employment growth (favouring those occupations which are more higher education intensive), and an increase in average skill requirements within occupations over time (consistent with productivity growth).

**A comparison of student supply and labour market demand** projections for qualifications is set out in Table 1.
### Table 1: Projected student demand and implied labour market demand for qualifications

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply of students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>57,778</td>
<td>58,659</td>
<td>59,478</td>
<td>60,218</td>
<td>61,039</td>
<td>61,892</td>
<td>62,711</td>
<td>63,605</td>
<td>64,534</td>
<td>65,461</td>
<td>66,548</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>115,930</td>
<td>117,926</td>
<td>119,771</td>
<td>121,357</td>
<td>122,798</td>
<td>124,034</td>
<td>125,032</td>
<td>125,934</td>
<td>126,814</td>
<td>127,796</td>
<td>128,956</td>
</tr>
<tr>
<td>Diploma/Advanced Diploma</td>
<td>39,625</td>
<td>40,263</td>
<td>40,853</td>
<td>41,383</td>
<td>41,884</td>
<td>42,381</td>
<td>42,820</td>
<td>43,230</td>
<td>43,627</td>
<td>44,041</td>
<td>44,580</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>213,334</td>
<td>216,848</td>
<td>220,103</td>
<td>222,958</td>
<td>225,721</td>
<td>228,307</td>
<td>230,563</td>
<td>232,769</td>
<td>234,976</td>
<td>237,298</td>
<td>240,084</td>
</tr>
<tr>
<td><strong>Labour market demand</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>44,663</td>
<td>36,033</td>
<td>52,383</td>
<td>50,715</td>
<td>55,370</td>
<td>55,222</td>
<td>50,377</td>
<td>49,311</td>
<td>48,974</td>
<td>54,395</td>
<td>48,974</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>145,379</td>
<td>115,381</td>
<td>193,545</td>
<td>163,886</td>
<td>159,871</td>
<td>174,985</td>
<td>173,753</td>
<td>156,667</td>
<td>168,298</td>
<td>150,588</td>
<td>150,588</td>
</tr>
<tr>
<td>Diploma/Advanced Diploma</td>
<td>45,729</td>
<td>30,489</td>
<td>56,016</td>
<td>44,081</td>
<td>43,131</td>
<td>46,996</td>
<td>39,920</td>
<td>37,709</td>
<td>42,921</td>
<td>37,407</td>
<td>37,407</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>235,771</td>
<td>181,904</td>
<td>309,965</td>
<td>260,350</td>
<td>253,717</td>
<td>278,384</td>
<td>275,971</td>
<td>246,963</td>
<td>239,339</td>
<td>265,614</td>
<td>236,970</td>
</tr>
<tr>
<td><strong>Difference (supply less demand)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>13,116</td>
<td>22,626</td>
<td>-927</td>
<td>7,835</td>
<td>10,323</td>
<td>6,522</td>
<td>7,489</td>
<td>13,228</td>
<td>15,223</td>
<td>11,065</td>
<td>17,574</td>
</tr>
<tr>
<td>Diploma/Advanced Diploma</td>
<td>-6,104</td>
<td>9,773</td>
<td>-15,162</td>
<td>-2,698</td>
<td>-1,247</td>
<td>-5,648</td>
<td>-4,176</td>
<td>3,311</td>
<td>5,918</td>
<td>1,120</td>
<td>7,172</td>
</tr>
</tbody>
</table>

*Source: Access Economics 2008, Future demand for higher education*

This table shows that, from 2010, total demand for people with higher education qualifications will exceed supply and that this will continue for most of the forecast period. This is driven by excess demand for undergraduate qualifications (with projections for postgraduate qualifications and diplomas and advanced diplomas closer to balance). To give some idea of orders of magnitude, in 2018, for example, it is estimated that there will be a shortfall of about 22,000 people with undergraduate qualifications, compared with an estimated 129,000 undergraduate completions that year.

The levels of excess demand are projected to fall over time as employment growth slows (driven by an expected decline in labour force participation during the next decade).

Access Economics suggests that a mismatch between supply and demand could create incentives for changes to occur, including in relative wages; different demographics and pathways for higher education; interstate and international migration levels; and the concordance between occupations and qualifications.

A core underlying assumption of the Access Economics (2008) modelling is that upskilling⁴ of the workforce over time will be a major contributor to labour market demand. If this upskilling does not occur, demand for higher education qualifications is expected to be

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⁴ Upskilling represents the increase observed in the average level of qualifications in the workforce over time. Enhancement of skills can also occur through other mechanisms such as on-the-job training.
more subdued, with the likely supply of students more than adequate to cater for expected employment growth.

Access Economics (2008) points to evidence from the Australian Bureau of Statistics Survey of Education and Work which shows a trend of increases in the share of the workforce holding postgraduate or undergraduate qualifications as their highest level qualification, which has occurred across most broad occupational categories over the last five years. However, it finds that the share of the workforce holding diplomas or advanced diploma qualifications as their highest level qualification has changed little in aggregate over the past decade.

Access Economics (2008) projects that a shortfall will occur in the supply of graduates over most years of the next decade, even though the quantum will vary substantially between years. In part, this reflects Access Economics’ view of the business cycle over the next decade which affects the rate of employment growth.

In another study commissioned for the review, Birrell et al. (2008) found that Australia will have insufficient higher education students to meet its needs. Birrell et al. argued that this will occur despite student supply increasing in response to demographic change and students responding to projected growth in professional and para-professional employment5.

3.1.2 Skill shortages

Australia has suffered persistent skill shortages in a number of professional areas served by the higher education sector. However, the global economic downturn may moderate the extent of labour shortages in the short to medium term. While an increase in overall higher education attainment will help alleviate such shortages, they are unlikely to be eliminated. Other factors such as time lags, salary levels and employment conditions can cause skills shortages in specific areas. Notwithstanding the general decline in vacancies associated with the current economic downturn, vacancies and shortages are likely to persist in some occupations and geographic regions and the loss of skilled labour from the labour market may accentuate skills shortages as the economy picks up.

To address occupations with labour supply shortages, incentives may be required to encourage students to enrol in relevant courses and institutions to provide courses which are aimed at addressing specific and localised skill shortages. Options are explored further in Chapter 4.2.

3.1.3 How is Australia placed to achieve higher levels of educational attainment?

Aggregate educational attainment at the post-school level involves a complex interplay of factors which include levels of Year 12 retention, access and pathways to tertiary education (both higher education and post-school Vocational Education and Training) and successful completion of courses.

Australia’s Year 12 retention rates have improved significantly since the 1980s. However they are still marginally below the Organisation for Economic Co-operation and Development (OECD) average and well below the top six performing OECD countries (OECD 2008b).

5 The panel’s discussion paper noted that researchers differ on the extent to which they believe Australia’s future skill needs should be met by the higher education or by vocational education and training systems. For example, Shah and Burke (2006) consider that the labour market will need significantly more people to acquire vocational education and training qualifications over the next decade than higher education qualifications.
Raising Year 12 retention rates would help to increase the pool of potential higher education students. While Year 12 retention is outside the scope of this review, the panel notes that it is a policy focus for all Australian governments.

**Attainment (completion of qualifications)**

International benchmarks like the OECD comparison of educational attainment show that Australia’s level of educational attainment of undergraduate qualifications is below the top six OECD countries. Australia’s relative ranking for 25- to 34-year-olds has declined over the ten years from 1996 to 2006 (OECD 1998; OECD 2008b).

More specifically, Table 2 shows that, between 1996 and 2006, the proportion of Australia’s population aged 25 to 34 years who had attained undergraduate qualifications increased from 16 to 29 per cent. However, Australia’s relative ranking slipped from seventh among OECD countries to ninth. This is because countries such as Sweden, New Zealand and Finland improved at a faster rate. For example, the proportion of Sweden’s population aged 25 to 34 years who attained undergraduate qualifications increased from 11 per cent to 31 per cent between 1996 and 2006, with its ranking improving from 18 to 6.

**Table 2: International comparisons of educational attainment – percentage of bachelor degree or above**

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>15</td>
<td>16</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>OECD median</td>
<td>12</td>
<td>14</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>OECD - top 6 countries</td>
<td>19</td>
<td>23</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>13</td>
<td>15</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>United States</td>
<td>26</td>
<td>26</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Canada²</td>
<td>17</td>
<td>20</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Korea</td>
<td>19</td>
<td>30</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td><strong>Australia - Ranking</strong></td>
<td><strong>6</strong></td>
<td><strong>7</strong></td>
<td><strong>6</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

*Note: Excluding ISCED 3C short programs. Due to the classification system adopted by the Canadian Labour Force Survey, elements of ISCED 4 are contained within ISCED 5B. This results in a higher percentage of the population with diploma and above qualifications and a lower percentage with Year 12 or equivalent or above qualifications.*


**Access (number of students entering education and training)**

Australia performs well in terms of the proportion of young people entering tertiary education. The Longitudinal Survey of Australian Youth (LSAY) tracked a cohort of young people aged 15 in 1995 and demonstrated that by the time they were 25 years old, 87 per cent had entered post-school education and training. About half had enrolled in higher education and the other half in post-school VET (Underwood, Hillman & Rothman 2007).

A significantly smaller proportion of the cohort had completed their qualifications by age 25. Thirty-two per cent had completed higher education qualifications and 44 per cent post-school VET qualifications. This might be partly explained by the longer duration of study in higher
education, and it is likely that some 25-year-olds were still studying and would complete their studies at some time in the future. Nevertheless, there appears to be a gap between entering and completion of studies. This is confirmed by OECD data on completion rates.

Completion rates

OECD data show that, in 2005, Australia’s completion rate was 72 per cent compared with the OECD average of 69 per cent (OECD 2008b). While Australia’s performance was better than the average, a non-completion (attrition) rate of 28 per cent suggests that improving the quality of the student experience is well worth attention.

Research indicates that completion rates vary significantly when considered in terms of gender, socio-economic background, field of study, age and basis of admission to higher education. They also vary by institution (DEST 2001).

Factors affecting an individual’s completion are complex and can include the level of support from teachers and the institution, course content, course satisfaction, and the student’s own expectations and personal circumstances. Institutions can influence some, but not all, of these factors to produce a more favourable outcome. On the other hand, some level of attrition must be expected and should be accepted.

3.1.4 Setting targets for higher education attainment in Australia

There is a need for decisive action to address the likely shortfall in numbers of qualified people in Australia over the next decade. Initiatives to address this challenge were put in place by the Council of Australian Governments Productivity Agenda Working Group, which recently set a target that by 2020, Australia will halve the proportion of Australians aged between 20 and 64 years without qualifications at the certificate III level and above (Rudd & Gillard 2008). The current number of Australians in the 15- to 64-year-old age group without post-school qualifications is nearly 6.5 million.

Higher education must be a significant contributor to the achievement of the Council of Australian Governments targets. The panel’s recommendations for attainment and participation targets will establish the direction for this contribution.

Setting targets for the achievement of any goal does not of itself ensure that the goal is achieved. However, it can help. Setting targets that are clear and transparent can focus the mind of policymakers on what needs to be done to achieve the target and can help the community hold policymakers accountable.

However, for targets to be credible they need to be consistent with the overall goal of the policy; achievable, even if difficult; and sufficient resources must be available over the long term to fund the practical initiatives that will inevitably be required to ensure that targets are achieved.

A number of countries have recently set targets for higher education. These include: targets around access (proportion of population which is embarking on higher education); participation (proportion of population which is undertaking higher education); and attainment (proportion of population which has completed a higher education qualification). Some examples are set out in Table 3.
Table 3: Targets for higher education: selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Measure</th>
<th>Age cohort</th>
<th>Time period</th>
<th>Target level</th>
<th>Current level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>Participation</td>
<td>Up to 25 years</td>
<td>N/A</td>
<td>50% of those under 25 should have embarked on university-level education</td>
<td>Target almost achieved</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Participation</td>
<td>18 to 30 years</td>
<td>By 2010</td>
<td>50% participation in higher education</td>
<td>43% in 2003</td>
</tr>
<tr>
<td>Germany</td>
<td>Access</td>
<td>Year group</td>
<td>By 2020</td>
<td>Increase the percentage entering tertiary education to 40%</td>
<td>Not available</td>
</tr>
<tr>
<td>Ireland</td>
<td>Participation</td>
<td>Tertiary relevant age cohort</td>
<td>By 2020</td>
<td>72%</td>
<td>55% in 2004b</td>
</tr>
<tr>
<td>Finland</td>
<td>Attainment</td>
<td>30 to 34 years</td>
<td>By 2015</td>
<td>50% are higher education graduates</td>
<td>40% in 2008</td>
</tr>
</tbody>
</table>

Note: a) Definitions of measures may vary across countries. However, there are some consistencies outlined here. Tertiary participation measures generally refer to the proportion of a given cohort enrolled at tertiary institutions at a given time. Tertiary access measures generally refer to the proportion of a given cohort that has commenced tertiary education at a given time. Tertiary attainment measures generally refer to the proportion of a given cohort that has completed tertiary education. b) This statistic refers to the total number of full-time entrants to higher education divided by an estimate of the total numbers of 17- to 19-year-olds in the population. Mature entrants (and other entrants outside the 17- to 19-year age range) are included in this statistic. Therefore increases in full-time mature students (entering higher education for the first time) will contribute to the achievement of this target, as of course will increases in the proportions of students from secondary level education transferring to higher education.) [National Plan for Equity of Access to Higher Education 2008-13].


The panel is of the view that a target should be set for higher education attainment (completion of a qualification) rather than access (commencement) or participation (enrolment), as graduates feed directly into the workforce to meet labour market demand. Even if targets based on access or participation were achieved, they may have less impact on growth and productivity if a high proportion of students do not complete their studies.

The panel considers that the attainment target should focus on undergraduate qualifications, as this is the basic higher education qualification providing entry to high-skilled employment. In addition, Access Economics (2008) predicts that undergraduate qualifications will be in under-supply over the next decade, providing another reason to focus on this level.

The target should apply to 25- to 34-year-olds, as this is the group for whom policy changes will have the most direct impact over the next decade. In 2006, 29 per cent of 25- to 34-year-olds in Australia had attained a qualification at bachelor degree or above. A target of 40 per cent of 25- to 34-year-olds having attained an undergraduate qualification by 2020 takes account of current performance, is competitive with high-performing overseas countries and looks to future needs. The panel believes it is achievable if policy directions proposed in subsequent chapters are accepted and appropriately resourced by the Australian Government.
This can best be achieved by a fully demand-driven, student-entitlement system for funding domestic higher education students, which will free up higher education providers to meet the needs of students and the community.

Recommendation 2
That the Australian Government set a national target of at least 40 per cent of 25- to 34-year-olds having attained a qualification at bachelor level or above by 2020.

Scope to increase the supply of higher education qualified people

Achievement of the attainment target outlined above will require concerted action on a number of fronts, including increasing Year 12 retention rates at secondary-school level.

Increase attainment for people from under-represented groups
While entry rates to post-school education and training appear relatively high, particular groups within the population are under-represented in higher education. Scope exists to increase participation by these groups, which include people from low socio-economic backgrounds, those from regional and remote areas and Indigenous people.

Improve pathways from vocational education and training to higher education
In some cases, an effective way to improve access for people from under-represented groups is to streamline movement from VET to higher education. VET is a common pathway to higher education for many people from under-represented groups. However, while improving pathways is important, it must be recognised that this form of provision is not primarily a feeder for higher education and its primary purposes must not be distorted by the need to increase higher education participation. This is discussed further in Chapter 4.3.

Increase completion rates in higher education
A completion rate of 72 per cent offers some scope for improvement. Losing 28 per cent of those who have already indicated an interest in higher education appears wasteful of the talent of Australians. Limited evidence exists about the reasons behind student non-completion. The panel suggests that the Australian Government commission further research into the reasons for non-completion.

In the meantime, action can be taken in two areas. First, prospective students can be supplied with additional information about courses so they have realistic expectations of the course on which they intend to embark. Second, additional support can be provided to assist them to complete their studies.

Encourage workers to upgrade their qualifications
Workers seeking to upgrade their skills and qualification levels must be encouraged to enrol in higher education. While data shows that many mature-age entrants to higher education are building on undergraduate qualifications, a proportion are undertaking their first undergraduate degree and more should be encouraged to take this path. While people aged 35 and over upgrading their skills will not contribute to the national attainment target, it will lead to upgrading of the skills base of the workforce.
Change funding incentives to higher education providers

A new funding system would provide incentives to a wider range of higher education providers to seek out and enrol a broader group of students and would provide them with the flexibility to respond quickly to changes in labour market and student demand. The panel’s proposed new financing framework is discussed further in Chapter 4.2.

3.1.5 Academic workforce

While this review has focused its attention on the broad issue of the medium- and long-term demand for qualifications and skills in Australia, the academic labour market needs urgent attention if the recommendations in this review are to be achieved. The capacity of the higher education sector to meet future labour market needs will be critically affected by the quality and capacity of the academic workforce.

The sector faces increasing difficulty in attracting and retaining high-quality academic staff. Indeed, in its submission to the review, the Australian Technology Network suggested that this was ‘the single biggest issue confronting the sector over the next decade’ (p. 14).

Four key factors which contribute to this shortfall are discussed below.

An additional factor relating to the changing nature of demand for higher levels of qualifications for academics is discussed in Chapter 3.5.

Academic workforce ageing

The academic workforce is ageing, and this is a worldwide phenomenon. Figure 1 shows the extent of the challenge, in the significantly higher proportion of Australian academic staff in the 45- to 54-year and 55- to 64-year age groups than the total Australian labour force. Academics in their 20s and 30s (‘Generation X’) in particular are significantly under-represented (Hugo 2008).

Unless this challenge is addressed, increasing numbers of retirements over the next decade will result in staff shortages. Of particular concern is the number of staff aged over 50 in discipline areas such as education, humanities, mathematical sciences and nursing (Hugo 2008).

Modest growth rates in recent years in the number of people undertaking doctorates by research suggest that recruiting additional younger staff will present challenges. This is discussed further in Chapter 3.5.

Casualisation reduces attractiveness of an academic career

Australian universities are highly dependent on a casual workforce. According to the RED Report, published by The Australian Learning and Teaching Council (ALTC) in June 2008, all Australian universities depend heavily on sessional teaching staff, defined as ‘any higher education instructors not in tenured or permanent positions, and employed on an hourly or honorary basis’ (ALTC 2008, p. 4). An estimated 40 to 50 per cent of all teaching in Australian higher education is conducted by sessional staff (ALTC 2008).

Another study reported that sessional staff experience income insecurity, workloads beyond their paid hours, and feelings of isolation from the university community (Brown, Goodman & Yasukawa 2008).
Other researchers caution that casualisation adversely impacts upon younger academic staff in particular: ‘the use of flexible and casual working arrangements ...disproportionately affects younger academics at the start of their careers and might serve to discourage young researchers from entering or remaining in the academic profession’ (Kubler & DeLuca 2006, p. 67). These studies suggest that the casualisation of the academic workforce has reduced its attractiveness as a profession.

**Working conditions reduce attractiveness**

In a recent survey of universities in Commonwealth countries (Kubler & DeLuca 2006), Australian institutions reported moderate difficulty in recruiting academic staff and little difficulty in retaining staff. However, most anticipated both recruitment and retention of academic staff to become more challenging over the next five years, particularly in business studies, engineering, medicine and clinical sciences. The survey identified the level of remuneration as the most significant factor affecting recruitment and retention, with other important factors being research, teaching and administrative resources and pressures, and the external reputation of the institution.

According to the OECD, evidence exists that the relative attractiveness of becoming an academic has decreased globally: ‘low salary levels, in particular when compared to the private sector, are a commonly cited source of dissatisfaction among academics in many countries’ (OECD 2008a, vol. 2, p. 145).

International evidence exists that an increase in workloads and pressures on academics has led to reduced levels of satisfaction (OECD 2008a).

In Australia, higher student-to-staff ratios exacerbate this situation. An Australian study conducted early this decade concluded that ‘Australian university staff, particularly academic
staff, are highly stressed. Diminishing resources, increased teaching loads and student-staff ratios, pressure to attract external funds, job insecurity, poor management and a lack of recognition and reward are some of the key factors driving the high level of stress’ (Winefield et al. 2002, p. 8).

Coates et al. (2008) reported that the academics whom they surveyed did not encourage young people to pursue an academic career.

**Global competition for high-quality academics**

Competition has increased in the international academic labour market, where demand for good-quality teaching and research staff is high. English-speaking academics are in particularly high demand. As a disproportionate number of academics retire, the OECD has noted that ‘OECD employers will increasingly need to look abroad for talent as new graduates will become insufficient to replace staff going into retirement’ (OECD 2008a, vol.2. p. 236). This will increase the level of competition to attract and retain high-quality academic staff.

Such competition is reflected in increased global migration and the internationalisation of labour markets. As the United Nations noted in 2006:

- virtually all OECD countries are seeking skilled migrants, where in the past only a few nations, such as Australia, New Zealand, the United States and Canada were seeking immigrants;
- a high demand exists for researchers, scientists and highly productive academics; and
- a substantial increase has occurred in student migration, particularly at the postgraduate level (cited in Hugo 2008).

Historically, Australia has been a significant employer of overseas academic staff. In 2006, 40.5 per cent of Australian academic staff had a country of birth other than Australia, compared with 25.7 per cent of the total workforce and 23.9 per cent of the total Australian population. This reflects the rapid expansion of Australia’s university sector in the 1960s and 1970s, when many young academics were recruited from overseas, especially the United Kingdom. The introduction in 1996 of the temporary business migration categories, which allow recipients to work in Australia for up to four years, gave universities more freedom to look overseas for academic talent, and universities are among the highest users of these visas (Hugo 2008).

However, while the use of temporary business migration visas allows the sector to compete for global talent, their temporary nature means that high staff turnover exists. Despite a net gain of academics through migration, an increasing proportion of immigrant academics are not coming to continuing positions in Australian universities. In addition, increasing numbers of Australian academics are leaving Australia to work overseas on a long-term or permanent basis (Hugo 2008).

While many Australian academics working abroad would like to return home, they feel unable to do so because of lower pay, inferior resources and difficulty of career progression (Hugo 2008). In addition, while overseas many partner and have children, reducing the likelihood of their returning to Australia.
**Action required**

Based on the analysis above, action is required to enhance Australia’s attractiveness to current and potential academic staff through three related strategies:

- **Increase the number of home-grown academics by training more postgraduate researchers in Australia.** According to one study, ‘those who complete their research training at home are more inclined to stay at home’ (Turpin et al. 2007, p. 13). Initiatives to bolster the number of research higher degree students enrolled in the sector are discussed further in Chapter 3.5.

- **Improve the relative attractiveness of working conditions.** Such action has already begun, with some higher education providers offering targeted financial incentives, particularly in areas of critical staff shortages. Eighty per cent of Australian and New Zealand respondents to a survey (Kubler & DeLuca 2006) reported financial incentives to recruit staff. A recent study suggested that, by international standards, academic pay rates are relatively good in Australia (Rumbley, Pacheco & Altbach 2008). However, they may still not compare favourably with professional and private sector rates.

- **Greater job security and flexibility in working arrangements must be examined as part of the solution.** In that context, lower student-to-staff ratios should result in greater staff satisfaction and reduced stress.

An additional strategy is to increase the number of international students who come to Australia to undertake higher degrees by research. This is discussed further in Chapter 3.6.
3.2 Providing opportunities for all capable students to participate

Australia needs to make the most of the talents of all its people. Individuals who participate in higher education are enriched not just intellectually through engagement with local, national and global communities, but also economically by gaining access to challenging, highly-skilled and well-paid jobs. A recently-released study calculates that ‘over the working lifetime of a university graduate the financial gain generated from income is more than $1.5 million or 70 per cent more than those whose highest qualification is Year 12’ (NATSEM 2008, p. 1). Of course, their success benefits the whole society with its contribution to national productivity. An effective higher education sector which makes greater use of Australia’s human capital enhances national productivity and global competitiveness.

However, Australia has not provided equal access to all groups from society. People from lower socio-economic backgrounds, those from regional and remote Australia as well as Indigenous Australians are under-represented in higher education compared to their incidence in the general population. Improving access and equity in higher education for these groups is a difficult task and the solutions that will help to resolve this challenge are not immediately obvious. Barriers to access for such students include their previous educational attainment, no awareness of the long-term benefits of higher education and, thus, no aspiration to participate. Once enrolled, they require higher levels of support to succeed, including financial assistance and greater academic support, mentoring and counselling services.

3.2.1 How well is Australia performing?

There has been an increase of up to 60,000 enrolments in the number of students from under-represented groups participating in higher education over the last decade. These increases are not even across the groups and some groups remain seriously under-represented.

However, significant progress has been made in some areas of previous under-representation. For example, women now participate in higher numbers than men although they still remain under-represented in higher degree research programs and in some non-traditional areas such as engineering and information technology.

Now, the most seriously under-represented groups are those from remote parts of Australia, Indigenous students, those from low socio-economic backgrounds and those from regional locations.
While students from non-English-speaking backgrounds appear to have experienced a decline in participation over the period, this is largely due to changes in immigration policy. The current higher education profile for these students is now broadly representative of the general population (see Table 4).

In interpreting the data it is important to understand that students may be counted more than once if they belong to more than one group. For example, an Indigenous student who is from a low socio-economic background will be counted in the relevant figures for each of those categories.

### Table 4: Degree of under-representation of groups, 2007

<table>
<thead>
<tr>
<th>Group</th>
<th>2007 Participation rate % in higher education</th>
<th>Proportion in general population a</th>
<th>2007 participation ratio b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-English speaking background</td>
<td>3.8</td>
<td>3.7</td>
<td>1.02</td>
</tr>
<tr>
<td>Students with disabilities</td>
<td>4.1</td>
<td>8.0c</td>
<td>0.51</td>
</tr>
<tr>
<td>Rural/regional</td>
<td>18.1</td>
<td>25.4</td>
<td>0.71</td>
</tr>
<tr>
<td>Remote</td>
<td>1.1</td>
<td>2.5</td>
<td>0.44</td>
</tr>
<tr>
<td>Low SES</td>
<td>15.0</td>
<td>25.0</td>
<td>0.60</td>
</tr>
<tr>
<td>Indigenous</td>
<td>1.3</td>
<td>2.2</td>
<td>0.59</td>
</tr>
</tbody>
</table>

**Note:** a) Based on ABS 2007 data, b) A participation ratio of 1 indicates appropriate representation of the equity group in the student population. c) Excludes profound and severe core activity limitation

**Source:** DEEWR
Figure 3: Change in numbers of various groups of students, 2002 to 2007

Source: DEEWR (Students, Selected Higher Education Statistics 2008)

Students with disabilities

Good progress has been made in improving participation for students with disabilities, as shown in Figure 2, although the level is still below the group's population share. Over the six-year period from 2002 to 2007, the number of students with disabilities increased by 5,000 and the participation rate rose from 3.4 per cent to 4.1 per cent. However, this increase has not been matched by a rise in support funds, which have been static since 2004. Funding arrangements for students with disabilities must be reconsidered for the future in both the amount distributed and the mode of distribution between universities. A recommendation on increased funding for students with disabilities is made in Chapter 4.2.

Focus for the future

While participation rates for all groups which have been covered by the previous policy should continue to be monitored, it is the following three groups that remain significantly under-represented:

- Students from low socio-economic backgrounds;
- Students from regional and remote areas; and
- Indigenous students.

Patterns of access, success and retention also vary across the under-represented groups and action must be appropriately adapted and targeted for each group in order to improve participation (which is a function of these three factors).

---

6 The participation rate for each under-represented group is a function of the rate at which new students from the group enter higher education, the success within each year and the retention between years.
Students from low socio-economic backgrounds

A student from a high socio-economic background is about three times more likely to attend university than a student from a low socio-economic background. The current access rate\(^7\) for this latter group is about 16 per cent, and has remained relatively unchanged since 2002. If students from this group were adequately represented, their access rate would be 25 per cent. The access and participation rates for low socio-economic status students over the last six years are shown in Figure 4.

However, these rates are not uniform across the sector. Quite distinct differences exist in low socio-economic status participation by type of institution, course level and field of study. Low socio-economic status students are poorly represented in Group of Eight universities; most highly represented in agriculture and education; and poorly represented in architecture, law and creative arts. They are particularly under-represented in medicine, dentistry and economics. Low socio-economic status students also comprise the majority of students in enabling courses.

Despite low access rates, the success rate (or tendency to pass their year’s subjects) of low socio-economic status students is 97 per cent of the pass rates of their medium and high socio-economic status peers and has been very stable over the last five years.

![Figure 4: Access and Participation Rates – Low socio-economic status (all ages)](image)

*Note: 25% of the Australian population is categorised as low SES*

*Source: DEEWR (Selected Higher Education Statistics, various years)*

Such high pass and retention rates show that those from low socio-economic backgrounds succeed in higher education. More of these students could participate in higher education without any detrimental impact on overall academic quality. A study conducted by the Australian Council for Educational Research as part of the Longitudinal Survey of Australian Youth (LSAY) Research series found that ‘if students from a low socio-economic background get to university, their background does not negatively affect their chances of completing the course’ (Marks 2007, p. 27).

\(^7\) Access rates show the proportion of the group in the total intake.
**Students from regional and remote areas**

People from regional and remote parts of Australia remain seriously under-represented in higher education and the participation rates for both have worsened in the last five years. Access and participation rates for these students over the last six years are shown in Figures 5 and 6.

**Figure 5: Access and participation rates – Regional**

<table>
<thead>
<tr>
<th>Access Rates %</th>
<th>Participation Rates %</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.5</td>
<td>18</td>
</tr>
<tr>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>18.5</td>
<td>19.5</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

2002 2003 2004 2005 2006 2007

**Percentage (%)**

**Note:** 25.4% of the Australian population lives in rural/regional areas

**Source:** DEEWR (Selected Higher Education Statistics, various years)

Retention of the regional group has also been decreasing relative to urban students and retention rates are now 3 per cent below the rates of the remainder of the student population. The success and retention patterns for remote students are of much greater concern. The indicator levels are very low compared with their non-remote peers. For example, success rates are currently 9 per cent below and retention is 13 per cent below the rates of other students.

**Figure 6: Access and participation rates – Remote**

<table>
<thead>
<tr>
<th>Access Rates %</th>
<th>Participation Rates %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>1.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

2002 2003 2004 2005 2006 2007

**Percentage (%)**

**Note:** 2.5% of the Australian population lives in remote areas

**Source:** DEEWR (Selected Higher Education Statistics, various years)
The retention rate of this group may be influenced by an overlap in group membership between remote and Indigenous students. James et al. (2004) reported that in 2002, 12 per cent of the isolated (remote) students group were Indigenous compared with only about 2 per cent for the rural group and 0.8 per cent for the urban group.

Regional and remote students are more highly represented in the fields of study of education, agriculture, health (mainly nursing) and veterinary science than other fields. Both of these groups are poorly represented in medicine, dentistry and some of the paramedical sciences as well as in law. They are also poorly represented in higher level courses, with participation in higher degree research courses at only about 10 per cent of the total pool.

**Indigenous students**

Indigenous people are vastly under-represented in higher education. Over the past six years access has continued a downward decline, while participation has improved slightly (see Figure 7).

Both success and retention rates have been volatile, but they remain significantly below the rates for non-Indigenous students. In 2006, Indigenous students passed their subjects at a rate 23 per cent below their non-Indigenous peers. In addition, the retention rate for Indigenous students has been between 19 per cent and 26 per cent below the rate for other students during the last six years.

Therefore, while access rates for Indigenous people remain well below the levels expected to achieve equitable representation based on population share, an equally important issue is their academic success and their retention once enrolled. Many Indigenous students leave university without an award.

Addressing access, success and retention problems for Indigenous students is a matter of the highest priority. Indigenous Australians suffer high levels of social exclusion. Higher education is one way of allowing them to realise their full potential. To do this, higher education providers must not only address their learning needs but also recognise and act on issues such as the culture of the institution, the cultural competence of all staff – academic and professional – and the nature of the curriculum.

**Indigenous knowledge**

Indigenous involvement in higher education is not only about student participation and the employment of Indigenous staff. It is also about what is valued as knowledge in the academy. Indigenous students and staff have unique knowledge and understandings which must be brought into the curriculum for all students and must inform research and scholarship.

Indigenous people do not come empty handed to Australia’s higher education system but bring significant strengths, both in knowledge capital and human capital that enriches higher education in Australia. The recognition of Indigenous peoples’ contribution as well as needs, is critical to full Indigenous engagement in higher education (Indigenous Higher Education Advisory Council submission, p. 2).
It is critical that Indigenous knowledge is recognised as an important, unique element of higher education, contributing economic productivity by equipping graduates with the capacity to work across Australian society and in particular with Indigenous communities. Arguments for incorporation of Indigenous knowledge go beyond the provision of Indigenous specific courses to embedding Indigenous cultural competency into the curriculum to ensure that all graduates have a good understanding of Indigenous culture. But, and perhaps more significantly, as the academy has contact with and addresses the forms of Indigenous knowledge, underlying assumptions in some discipline areas may themselves be challenged.

![Figure 7: Access and participation rates – Indigenous](image)

**Note:** 2.2% of the Australian population is Indigenous

**Source:** DEEWR (Selected Higher Education Statistics, various years)

**Type and location of institution**

Institutional performance in facilitating access for under-represented groups is not uniform across the sector. The distribution of low socio-economic status student enrolments is skewed with the Group of Eight institutions, shown in purple in Figure 8, having the lowest enrolment of low socio-economic status students, while the post-1988 universities and some of those established in the 1960s and 1970s provide more equitable access.

Universities with at least one rural or regional campus also have higher access rates for students from low socio-economic status backgrounds and for those who come from regional and remote areas. The location of regional and remote institutions, therefore, contributes in a significant way to the participation of students from neighbouring rural areas.

While it may not be possible for all institutions to attain the same levels of participation across all of the under-represented groups, the panel is of the view that it should be possible to improve the performance of all institutions, taking into account their catchment areas and admissions profiles. Social inclusion must be a core responsibility for all institutions that accept public funding, irrespective of history and circumstances.
Figure 8: Access rates for low SES students by type of university, 2007

Figure 9: Access rates for regional and remote students by location of university campuses, 2007

Note: Low SES is determined using a postcode methodology. Students from low SES backgrounds are those whose permanent home address postcode falls within the lowest 25 per cent of postcodes as coded by the ABS SEIFA Index of Education and Occupation (Census 2006). Under the MCEETYA categorisation, metropolitan zones are classified as major urban statistical districts with 100,000 or more population, including ACT-Queanbeyan, Cairns, Gold Coast-Tweed, Geelong, Hobart, Newcastle, Sunshine Coast, Townsville, Wollongong. A regional campus is identified where there is an enrolment load of more than one hundred.

International comparisons of equity performance

The persistence of low participation rates for low socio-economic status students relative to their high socio-economic status peers is a concern in many higher education systems across different cultural, political, economic and educational settings. There is also evidence of differential performance in those systems between the longer established and other institutions as in Australia.

It is difficult to make direct international comparisons between participation rates for students from low socio-economic backgrounds because the concept is defined differently in each country. However, what information is available shows parallel patterns of participation irrespective of whether low socio-economic status is defined by class or geographic area.

International comparisons of participation by socio-economic status

In the United Kingdom, participation rates show a similar relationship to population benchmarks as in Australia. Young full-time, first-degree entrants from low socio-economic status groups comprise 29 per cent of enrolments compared with the population benchmark of 50 per cent.

Initiatives to broaden participation in higher education in the United States to date have been mainly focused on race, but it is now recognised that low socio-economic status is a primary determinant. In the United States, higher education sector enrolments have increased at a faster rate for low socio-economic status students than for more advantaged students (Baum & Ma 2007), contrary to the situation in Australia, but the system is extremely stratified in relation to performance. For each tier of the United States higher education system, the ratio of high to low socio-economic status students ranges from 24.7:1 in tier 1 institutions to 2.2:1 for tier 4 institutions. Only community colleges have a reasonably representative profile with the percentage of high socio-economic status students to low being 22:21 per cent.

The Canadian higher education system, while very different from Australia in its organisation and funding, shows similar patterns of participation. Over 75 per cent of young people from families with an income of over 75,000 Canadian dollars per year participate in higher education compared with 49 per cent of young people with a family income of less than $25,000. Eighty-one per cent of students from families with one parent who had a university education participate in higher education, compared with 53 per cent from families with parental education levels of high school or lower (Berger, Motte & Parkin 2007). Research has shown that the majority of the gap in participation between low and high socio-economic status students in Canada can be explained by educational background rather than financial constraints.

Although, superficially, the Australian record appears no worse than these countries, some have significantly improved participation rates in recent years, while Australia’s participation rates have remained relatively static. Successful approaches have involved well-funded outreach and retention initiatives. For example, the United Kingdom Improving Retention program has significant amounts of funding associated with it (£187 million) and allocates these funds based on student profile. This and the parallel Widening Participation initiative have, along with other measures, resulted in considerable improvement in participation rates of under-represented group students in a relatively short time.

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8 Summary derived from James et al. 2008.
9 In Australia, the population benchmark for Low SES is 25 per cent.
3.2.2 The current policy and funding framework

The current policy and funding settings have not led to more equitable higher education outcomes in Australia for under-represented groups in terms of enrolments in universities.

Policy relating to access and equity had its genesis in *Higher Education: a policy statement* (the White Paper) of 1988 (Dawkins) and *A Fair Chance for All* (DEET & NBEET 1990) which argued that Australia needed a more equitable higher education sector and that direct strategies were needed at the national, state and institutional levels to achieve this.

Since 1988, funding of higher education equity programs has been provided in three core areas: Equity Support Funding (previously Higher Education Equity Program funding); Disability Support Funding and the Indigenous Support Program. In 2004 the Commonwealth Scholarships Program was introduced and in 2008 it provided about $118 million worth of scholarships to help with the costs of higher education for low socio-economic status, rural and Indigenous students. However, this program does not appear to have helped improve access for these key groups.

The total amount provided for equity programs represents only 1.2 per cent of the government expenditure on teaching in the sector. Many students from under-represented groups require significant additional support to undertake their studies successfully. While institutions have supplemented this small amount of equity funding by cross-subsidising from other activities in order to deliver such services, and have been creative in developing a range of access initiatives, the quantum of funds provided has been insufficient to make significant headway in improving participation from under-represented groups.

Support for Indigenous students

In response to concerns about Australia’s poor performance in higher education for Indigenous people a range of initiatives to increase access and success was put in place by the Australian Government in 2005. Current initiatives to support Indigenous students include:

- Indigenous Support Program which provides grants to eligible higher education providers to meet the needs of Indigenous students and advance the goals of the National Aboriginal and Torres Strait Islander Education Policy. Funding for the program is performance-based, with $34.06 million allocated in 2008.
- Indigenous Tutorial Assistance Scheme which provides funding for supplementary tuition to eligible Indigenous students. $31.6 million has been provided for the program over 2005-08.
- Away from Base funding which is provided to assist education institutions meet the costs of students or staff away from their normal place of residence as part of a mixed-mode course of study. In 2007, $28.41 million was allocated to this program.
- Indigenous Youth Mobility Program which assists young people from remote areas to relocate to major centres around Australia to take up apprenticeships, vocational education and training and higher education opportunities. A total of $2.21 million was provided for this program in 2007.
- Indigenous Access Scholarships provide a one-off payment of $4,080 (indexed annually) to Indigenous students upon commencement of an undergraduate course.
• Indigenous Enabling Scholarships form part of the Commonwealth Scholarships program and are provided for education and accommodation costs for students undertaking an approved higher education enabling course who require relocation from a regional or remote area. In 2008, 210 accommodation scholarships were provided at a cost of $908,040 and 585 education costs scholarships were provided at a cost of $1.27 million.

• Indigenous Youth Leadership program which provides scholarships worth $6,000 per annum for Indigenous students, generally from remote areas, to attend high-performing schools and universities and develop and fulfil roles as Indigenous leaders in their community. $12.9 million has been provided for 250 scholarships over 2006-09 and an additional $34.4 million has been provided for 750 three-year scholarships available over four years to 2011.

• Indigenous Staff Scholarships which provide $11,600 (indexed annually) to cover tuition fees and a non-taxable stipend of approximately $23,000 (indexed annually) for each scholarship holder. Scholarships are available to Indigenous staff who have actively encouraged Indigenous students to participate in higher education and complete their courses.

In light of the recency of changes and the comprehensiveness of the current initiatives, the panel has concluded that it is not appropriate to make any recommendations for changes to these programs at this time. It has taken account of the fact that the recommendations in this report will increase support for the bulk of Indigenous students because where an Indigenous person is also of low socio-economic status, their enrolment will attract a loading to the enrolling institution. However, the panel urges Government to keep the effectiveness and outcomes of the programs for support of Indigenous participation under regular review after advice from Indigenous Higher Education Advisory Council.

What has been learned since 1990

In the early 1990s, Australia was at the forefront of good practice in establishing student equity as an area of national priority and developing a national framework and performance measures which enabled qualitative and quantitative assessment of progress towards targets at the national and institutional levels. James et al. (2008) states that the strength of the current system is that an evidence-based strategy has been taken in relation to monitoring equity.

The success of various initiatives undertaken by the public universities has been varied, particularly in relation to low socio-economic status, rural and Indigenous students. There have been some very effective programs but the next phase of activity requires a more sophisticated approach.

What has worked

Successful projects which have improved the participation of low socio-economic status, Indigenous and rural students in Australia have been highly targeted and operated in partnership or collaboratively with other sectors.

Overseas, successful projects have often involved cross-sectoral initiatives, outreach and early education programs involving partnerships between universities, colleges and schools, the establishment of national targets and major investments in improving retention.
**What hasn’t worked**

**Provision of general growth places in the system**

The belief that providing additional places would redress inequalities in participation without affirmative action has proven false. As James (2007, p. 6) notes, the imbalances by socio-economic status group have remained virtually unchanged since 1991: ‘the fact that with typical variations of only tenths of percentage points annually, and no discernible overall trend – during a period of significant expansion in the number of domestic students in Australian higher education is amazing. It is tempting to conclude that university admission/selection processes are quite resilient in reproducing a certain social order.’

**Outreach**

While much good work has been done in the sector to establish outreach programs, they have largely been focused on Year 11 or 12 students. The problem has been seen as an issue for higher education rather than one for all education sectors.

**Admissions and selection processes**

In spite of the range of special entry schemes now offered in the sector and the amendment of selection and admission policies in a number of institutions, most universities rely heavily on achievement of tertiary entry scores (TERs) to select students. This leads to a replication over time of the student profile.

The tendency to use the simplest and most defensible approach to admissions (such as the TER) has been exacerbated by the high levels of competition for places in some fields of study and the need to be able to defend admissions decisions to external bodies in an increasingly litigious environment.

Some institutions have proposed the use of aptitude tests as a means of admitting more disadvantaged students. While this may provide some improvement, it is unlikely to entirely eliminate the bias in outcomes by socio-economic status. The Canadian and United States experiences show that the design of the test and the tutoring available to higher socio-economic status students lead to a greater proportion of high socio-economic status students achieving higher scores (James et al. 2008). The panel has concluded that more widespread use of other approaches to selection and admission with a broader range of criteria in addition to or replacing the TER and which recognise structural disadvantage should be trialled.

**Measuring low socio-economic status**

Geographic area (postcode) has been used as a surrogate for defining socio-economic status and rural background in Australian higher education. This approach has also been used in some other countries. The geographic classification scheme used to determine membership of the regional and remote equity groups has been reviewed and a more appropriate approach implemented in 2007. The current postcode methodology for socio-economic status has been used since 1994 and has been the subject of much criticism in the sector.

In their 2008 study, James et al. (2008) argue that the current postcode index may under-estimate the under-representation of low socio-economic status people and that, although cost-effective, it is ‘inadequate for measuring both the aggregate patterns and the potential disadvantage of individuals, especially for some universities’ (p. 17). A more adequate way to measure individual student socio-economic status needs to be found to establish a baseline against which the success of future policy initiatives can be assessed.
Several studies have been undertaken on the most appropriate way to measure socio-economic status of higher education students. Many have recommended collection of information about parental education levels and occupation, and parental or household income. Several studies, most notably Western (1998) and Jones (2002), have trialled various approaches and have concluded that collection of data from students about their parents’ occupation and education is feasible and likely to yield the most reliable data, particularly over time. Collection of such information does not, per se, define socio-economic status. There is a need to link the distribution of data captured on these characteristics to population reference points or occupation classifications in order to define the socio-economic status group to which the student belongs. Little work has been done on such classifications and it would be required if the sector were to change the way it measures socio-economic status.

James et al. (2008) report in their analysis of student finances that parental education rather than occupation shows more substantial differences in students’ financial circumstances and their capacity to study. They recommend that parental education level be used to determine socio-economic status for higher education students. The applicability of this approach to mature-age students has been questioned. However Western (1998) considered this issue and concluded that social origins could be used reliably as a measure for socio-economic status of mature-age students as well as for school-leaver entrants. They determined that a methodology based on questions of parental education or occupation was also appropriate for the older group.

**Recommendation 3**

That the Australian Government commission work on the measurement of the socio-economic status 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.

### 3.2.3 Strategies for the future

Analysis of recent participation patterns and international comparisons shows that Australia is no longer at the forefront in this area of higher education performance. Reform of the approach to improving access and participation used over the last 15 years is required.

The challenges that must be addressed include:

- making a step change improvement in the entrenched low participation rates for under-represented groups;
- developing a more sophisticated approach to outreach activities to increase access rates for low socio-economic status, regional and remote and Indigenous students;
- appropriately recognising the levels of support required for a more diverse student profile and providing the necessary funding for institutions enrolling these students;
- removing financial barriers for students from low socio-economic backgrounds that discourage them from participating in higher education;
- funding social inclusion activities at appropriate levels to achieve the step change in participation required;
- determining a monitoring and reporting framework to ensure that social inclusion is taken seriously and that there is appropriate accountability for receipt of funds;
• working in particular with schools and with other higher education and TAFE providers to ensure the best solutions are found for under-represented groups of students; and
• determining an appropriate set of performance measures against which to measure higher education providers’ progress at achieving access and participation targets.

A step change in improvement in participation

A step change in participation will flow from developing strategies specific to each of the groups identified as being the most under-represented. Improving access is a central issue for all for groups, but, for Indigenous students, retention is also a major concern.

A more sophisticated approach to increasing access

Increasingly it is recognised that to improve access for disadvantaged groups three precursors to entry need to be addressed early in the educational cycle for potential participants:

- awareness of higher education;
- aspiration to participate; and
- educational attainment to allow participation.

Awareness of higher education

Disadvantaged students lack awareness of higher education and lack understanding of what is involved in preparing for it. Many students from low socio-economic backgrounds are not aware of the benefits of a higher education and what financial assistance is available to them, particularly if they are the first person in their family to aspire to higher education. Initiatives to improve awareness must involve working with parents and student influencers, and communicating the benefits of higher education through various outreach programs.

Aspiration to participate in higher education

Figure 10 shows the level of aspiration for tertiary study by socio-economic status quartile and country from the OECD Programme for International Student Assessment (PISA) data and identifies the scope of the problem that must be addressed. For every country, the percentage aspiring to continue with tertiary education is significantly higher for top (4th) quartile socio-economic status students than for the lowest (1st quartile).

Addressing aspiration means increasing the desire to attend university and putting it firmly on the ‘radar screen’ of potential higher education participants while they are still at school. James et al. (2008) report that in Australia 42 per cent of low socio-economic status Year 10-12 students surveyed in 1999 had a clear intention to attend university compared with 70 per cent of high socio-economic status students. Similar results were found for rural students compared with their urban peers. It is, therefore, necessary for any access initiatives to include encouraging potential students early in their schooling to aspire to attend university and providing information in an accessible form to such students.
Figure 10: Aspirations for tertiary study of 15-year-olds, (by quartile of the students’ economic, social and cultural status PISA index, 2003)


Educational Attainment

Poor educational attainment in the years leading up to higher education entry is a major factor limiting further access of low socio-economic status students to higher education. In Australia the main reasons low socio-economic status students do not attain a higher education are poor Year 12 completion rates, and progression to the vocational education and training sector or to work rather than higher education. James et al. (2008) show that the Year 12 completion rate for low socio-economic status students is 59 per cent across Australia compared with 78 per cent for high socio-economic status students. The corresponding values are 52 per cent for remote students and 69 per cent for metropolitan students.

Similar patterns are seen overseas. In the United Kingdom, projects have been directed at addressing practices in primary and secondary schooling to improve higher level secondary schooling outcomes, thereby improving the numbers entering higher education from disadvantaged backgrounds.

The OECD’s Thematic Review of Higher Education Tertiary Education for the Knowledge Society summarises student educational attainment as follows:

The most solidly based finding from research on school learning is that the largest source of variation in school achievement is attributable to differences in what students bring to school – their abilities and attitudes, and family and community background. Educational inequalities linked to family background tend to persist. The likelihood of staying on after the compulsory school-leaving age is linked to family background and social disadvantage in many countries. (OECD 2008a, Vol. 2, p. 36)
This underlines the entrenched nature of the problem of under-representation by these groups and the need for sophisticated responses to bring about change.

Effective solutions cannot be developed and implemented by higher education providers alone. Increasing access in higher education will require strong two-way relationships with other education providers and community organisations and will involve increasingly early interventions. In the cases of low socio-economic status students and others who have not traditionally been exposed to the sector, it will be essential to work with them and their families to raise awareness about the benefits of a higher education, to identify students early in their schooling who have academic potential, and to support them to continue with their education in order to gain entry.

Outreach and other access and entry programs appear to make the most significant difference to participation of under-represented groups. The United Kingdom and United States access initiatives which cross these educational and sectoral boundaries have been successful and the panel has concluded that additional funding should be directed to such initiatives. A recommendation that funding be provided for outreach activities is made in Chapter 4.2.

**Appropriate levels of support**

Action is required on the funding levels provided to support these students. Low socio-economic status and other under-represented groups of students are heavy users of academic and personal support services provided by universities, such as learning and language skill development; counselling; and financial services. As a result, the cost of educating a student from a low socio-economic background with little family experience of higher education is higher than for a higher socio-economic status student. At the University of South Australia usage rates of support services have been measured using a transparent identifier and compared with usage by other students. This has shown that the rate of support service usage by low socio-economic status students is higher than for other students. It is vital that such support services are maintained and developed to assist students from disadvantaged backgrounds.

The panel has concluded that significant additional funding needs to be provided to support the participation of students from low socio-economic backgrounds. This would recognise the additional costs of educating these students. It should be provided as a loading to the teaching grant on the basis of the numbers of low socio-economic status students enrolled at each university. A recommendation to this effect is made in Chapter 4.2.

The panel recognises that the detrimental effects of poverty on higher education participation can be compounded by where you live. The low participation rates of students from regional and remote areas are of particular concern. Students from these areas who are from low socio-economic backgrounds would attract the loading. However, the panel has concluded that more needs to be done to provide sustainable provision in regional areas because it believes that this, when combined with the outreach and support initiatives it is recommending, will help to improve the participation of students from these areas in higher education. This issue is discussed in more detail in Chapter 3.7, including a recommendation for funding for sustainable regional provision.
Indigenous students from low socio-economic backgrounds would also attract the loading, which would be provided in addition to the funding institutions currently receive for Indigenous students and the various Indigenous scholarship schemes. The current funding programs for Indigenous students, which include the Indigenous Support Program, Indigenous Tutorial Assistance Scheme, Away from Base funding and the Indigenous Youth Mobility Program should be continued.

The reporting and accountability framework

Under current arrangements, universities are required to report annually to the Department of Education, Employment and Workplace Relations on the participation and performance of under-represented groups. The data are analysed and benchmarked against similar institutions and against state and national averages. However, there is little consideration given to poor performance or remedial strategies that might be taken. Other higher education providers are not required to report on their performance in this area.

If significantly greater funds are to be provided for access and participation and allocated on the basis of achieving enrolments from the most under-represented groups in higher education and if action is to be expected from all providers in receipt of public funding, then it is critical that the reporting, monitoring and accountability processes be strengthened. If this is to be given a profile equivalent to other core functions then information about performance should be made public.

Working with other higher education and TAFE providers in a broad tertiary sector

The Australian vocational education and training (VET) sector has a socio-economic profile different from higher education. Figure 11 shows school-leaver data from the Longitudinal Survey of Australian Youth (LSAY) research report, The VET pathway for school leavers (Curtis 2008), and demonstrates that overall the vocational education and training sector performs better than higher education in attracting students from a low socio-economic background.

But within the VET sector there is also evidence of high levels of stratification. An analysis of student enrolments in vocational education and training by qualification level and socio-economic status category found that low socio-economic status students were concentrated in certificate I or II courses (Foley 2007). The participation rate of low socio-economic status students decreased as the level of the qualification increased and was only 6.8 per cent at diploma level or above. This closely reflects the participation rates of low socio-economic status students in universities.
Figure 11: Participation in post-school education by socio-economic status (post-school destinations of Y95 cohort in 2001)

Note: The figures sum to more than 100 per cent in some columns because some individuals undertook programs in more than one category.

Source: Longitudinal Survey of Australian Youth (LSAY), Research Report 52, The VET pathway for school leavers, D. Curtis, April 2008

**Targets and performance measures**

There is a need to re-establish sector-wide targets for participation of the groups which are still under-represented as was done originally in *A Fair Chance for All* (DEET & NBEET 1990). This would enable monitoring of progress against these targets in the longer term. In particular, a national target for the participation of students from low socio-economic backgrounds should be set and institutional targets that support its achievement should be agreed and monitored annually.

There should also be a set of sub-targets relating to success and retention and these should be benchmarked against the performance of other developed countries. While the use of different definitions for socio-economic status and rural background in each country makes this a difficult task, it is possible to define broad indicators which will be comparable across international boundaries against which Australia can monitor its relative performance.

The performance measures used in the sector since 1994 are still appropriate and adequately differentiate aspects of performance at the university and sector levels. They should therefore continue to be used to monitor national and institutional performance. Given the cumulative effect for Indigenous and remote students of poor retention and success rates between years, these indicators should be augmented by an additional outcome measure relating to completions.
Recommendation 4
That the Australian Government set a national target that, by 2020, 20 per cent of higher education enrolments at undergraduate level are people from low socio-economic status backgrounds.

The Department of Education, Employment and Workplace Relations should develop a set of benchmarks which provide comparable data with the United Kingdom, United States, Canada and other countries so that Australia’s performance can be regularly compared with that of other developed nations.

The following table provides an indicative list of suggested targets for groups of students that are currently under-represented in the higher education system.

Table 5: Suggested targets for under-represented groups of students in higher education

<table>
<thead>
<tr>
<th>Student group</th>
<th>Measure</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES students</td>
<td>Access rate</td>
<td>20% based on current postcode methodology or representative of the population share for the new low SES measure developed</td>
</tr>
<tr>
<td></td>
<td>Completion rate</td>
<td>At least 95% of the rate for high SES students.</td>
</tr>
<tr>
<td>Regional students</td>
<td>Access rate</td>
<td>Proportion of the population aged 15 to 64 years in this group as defined by the ARIA classification in the 2006 census</td>
</tr>
<tr>
<td></td>
<td>Success rate</td>
<td>Same rates as for metropolitan students</td>
</tr>
<tr>
<td></td>
<td>Retention rate</td>
<td>Same rates as for metropolitan students</td>
</tr>
<tr>
<td></td>
<td>Completion rate</td>
<td>Same rates as for metropolitan students</td>
</tr>
<tr>
<td>Remote students</td>
<td>Access rate</td>
<td>Proportion of the population aged 15 to 64 years in this group as defined by the ARIA classification in the 2006 census</td>
</tr>
<tr>
<td></td>
<td>Success rate</td>
<td>Same rates as for metropolitan students</td>
</tr>
<tr>
<td></td>
<td>Retention rate</td>
<td>At least 90% of that for metropolitan students</td>
</tr>
<tr>
<td></td>
<td>Completion rate</td>
<td>At least 90% of that for metropolitan students</td>
</tr>
<tr>
<td>Indigenous students</td>
<td>Access rate</td>
<td>Proportion that the Indigenous population aged 15 to 64 years represents of the general population in this age group in the 2006 census</td>
</tr>
<tr>
<td></td>
<td>Success rate</td>
<td>At least 95% of the rates for non-Indigenous students</td>
</tr>
<tr>
<td></td>
<td>Retention rate</td>
<td>At least 90% of the rate for non-Indigenous students</td>
</tr>
<tr>
<td></td>
<td>Completion rate</td>
<td>At least 90% of the rate for non-Indigenous students</td>
</tr>
</tbody>
</table>
3.3 Providing financial support to enable students to participate

A strong correlation exists between students’ socio-economic status and their participation in higher education. Income support and other financial assistance are critically important to attract financially disadvantaged students into higher education and keeping them there. The nation’s need for improved productivity as well as simple fairness means that we must ensure that people from this group are able to participate. Also financial support arrangements must encourage older workers to retrain or upgrade qualifications.

Any discussions of financial support must start with the recognition that the current option to undergraduate students to defer payment of fees or student contributions through income contingent loans removes one of the most significant financial barriers to participation. However, the additional living and study costs associated with higher education enrolment, particularly for those students who need to move away from home to study, are considerable.

A major cost of tertiary education for students is the opportunity cost of foregone earnings in the years while their time is devoted to study (NATSEM 2008). This cost is significantly higher for students with dependants and those from low-income households where current earnings are crucial to their families’ immediate well-being.

Anomalies in the current taxation and welfare support arrangements for students work against participation while current student financial support arrangements are complex and poorly targeted. The entire framework for provision of financial support for students needs urgent reform.

3.3.1 The current income support system

History

Current arrangements for student income support are administered through the social security system, primarily under the Social Security Act 1991 and the Social Security (Administration) Act 1999. Income support for students is aimed at providing assistance for individuals from low-income backgrounds while they are participating in schooling, tertiary education or training. Hence the main purpose of the income support strategy has been to:

- increase the participation of young people, particularly Indigenous and those from low socio-economic backgrounds, in senior secondary and tertiary education and training; and
- enhance the human capital outcomes in terms of the quality and diversity of skills and qualifications from university and other tertiary education.

Between 40 and 50 per cent of the student population has historically relied upon some level of income support to enable it to participate in education. It is startling that in recent years, while the number of students in the groups which might be expected to require income support has increased, the number receiving benefits has dropped. The reasons for the decline in access to income assistance need to be understood and changes made to improve access.
Looking to the future

The current income contingent loans system will continue to be the major assistance provided to domestic higher education students by the government and will cover most or all of the student contributions or tuition fees related to enrolment. Additional financial support to assist students with other education and living expenses will need to be provided as part of a reformed student income support system. To be most effective and equitable the scheme must be better targeted to those in most need.

A set of principles for the future organisation of income support for higher education students is outlined below.

Principles underpinning the income support system

The system must:

- Allow for a fair allocation of resources and treat recipients fairly.
- Link criteria to improving participation of financially disadvantaged students by:
  - targeting at the most needy students.
  - recognising the special financial needs of Indigenous, low socio-economic status and regional and remote students.
  - providing a satisfactory level of benefits to enable students to support themselves and their dependants with only a small amount of additional income supplementation.
- Assist national productivity by encouraging initial and ongoing participation by a broader group of the Australian community to make the personal investment in higher education study.
- Be easy to understand and to access by:
  - transparently and consistently applying criteria for access to benefits.
  - ensuring that assessment of eligibility criteria and access to benefits are completed in a timely fashion on application.

Current income support benefits

Youth Allowance is the primary payment assisting young people aged 16 to 24 years and enrolled full time in undergraduate and some postgraduate coursework programs in higher education. Generally, it is means tested and so is intended to be targeted at those families and students most in need of assistance. However, analysis undertaken for the review suggests that, as what appears to be an unintended consequence of changes introduced first in 1998, Youth Allowance is now being accessed by some students who are living at home in high socio-economic status households.

Austudy provides assistance to full-time students aged 25 years and over who are studying an approved course at an approved institution, or undertaking training or a full-time Australian Apprenticeship. Rates of payment are generally comparable to Youth Allowance and are means tested.
Australian Postgraduate Awards (APAs), administered through higher education institutions, provide stipends for living costs for higher degree research students. The Australian Postgraduate Awards offer full-time students enrolled in a research higher degree a stipend valued in 2008 at $20,007 per annum.

The Commonwealth Scholarships Program was introduced in 2004 to assist domestic students from low socio-economic backgrounds, particularly those from rural and regional areas, and Indigenous students, with costs associated with higher education. In 2008, the Commonwealth Education Costs Scholarship was valued at $2,162 per annum, and the Commonwealth Accommodation Scholarship at $4,324 per annum. The value of these scholarships is indexed annually using the Higher Education Indexation Factor. While the Commonwealth Scholarships are not intended for general living expenses, they provide supplementary assistance. There are some issues about the way the scholarships program works which need to be considered in the overall review of the various forms of income support.

Appendix VII shows the range of benefits paid under basic student income support, and the criteria and conditions relating to each program. This shows the variability in the conditions and benefits associated with the types of income support. The differences in eligibility criteria have led to some inconsistent treatment between applicants, particularly in relation to those students who have been categorised as having ‘independent’ status in relation to the eligibility criteria.

**Signs of problems with the system**

Concerns about income support arrangements have been growing. There is evidence of a decline in the financial circumstances of higher education students between 2000 and 2006; failure of student income support to accurately target those most in need; and a decline in Australia’s position compared with other countries in the provision of subsistence grants and scholarships. These factors may well be having an adverse impact on participation and attainment rates and the quality of the higher education experience for many.

### 3.3.2 The financial circumstances of Australian higher education students

Two studies on higher education student finances (Long & Hayden 2001; James et al. 2007) were commissioned by the Australian Vice-Chancellors’ Committee (now Universities Australia) in 2000 and 2006. While response rates to these surveys were low, they provide useful comparative information to see whether students’ financial circumstances have changed. The surveys show that undergraduate students are now worse off in financial terms than in 2000 and this has adversely affected their capacity to study effectively. Compared with the 2000 study, undergraduate students in 2006 had a greater reliance on paid work, non-cash assistance and loans in order to survive. At the same time, they received a lesser amount and proportion of total income in Commonwealth assistance from the combined sources of Austudy, Youth Allowance and Centrelink payments.

In 2006 nearly 71 per cent of full-time domestic undergraduate students reported working during semester. On average these students were working about 15 hours per week. One in six of the full-time undergraduate students who was working during the semester were working more than 20 hours per week. Paid work for full-time undergraduate students now comprises 66 per cent of their total income compared with 51 per cent in 2000. Seventy-four per cent
of full-time postgraduate coursework students and 79 per cent of full-time research degree students were working during semester, for an average of 20.3 and 11.3 hours respectively. A large proportion of students surveyed considered their paid work detrimentally affected their studies and limited their capacity to benefit from their university experience.

The 2006 study reported separately on the financial status of Indigenous students and acknowledged that these students often had distinctive family and financial situations which affected their capacity to study effectively. For example,

- Indigenous undergraduates in employment worked 3 hours more per week on average, and postgraduates 3.6 hours per week more, than non-Indigenous students;
- Indigenous students were more reliant on income support from scholarships and Centrelink payments and were less likely to rely on cash assistance from other people; and
- more part-time Indigenous students indicated they would prefer to study full time if their financial circumstances permitted it (77 per cent) than non-Indigenous part-time students (62 per cent), particularly those studying at the postgraduate level.

Students were also critical of the eligibility criteria for the two main student income support benefits (Youth Allowance and Austudy). Postgraduate students have an extremely high rate of rejection of their applications for income support. The rejection rate from Centrelink is over 16 per cent. The proportion of students who received a Centrelink benefit to support their studies, but did not receive the full rate, also increased significantly between 2000 and 2006 rising from 4 per cent of undergraduate students surveyed in 2000 to 7.3 per cent in 2006.

Even those students on the maximum benefits reported that the amount available from income support sources was insufficient to meet basic living costs. James et al. (2007) report that many students indicated that the high costs of textbooks and other learning resources were also a problem and that they were unable to afford such items. Submissions to this review from the National Union of Students and other student groups support these findings.

**Impact on the quality of student experience**

These issues are having a negative impact on the quality of the student experience for students at all levels of study and are causing them to change their patterns of enrolment. In their report on participation and equity in the sector, James et al. (2008) cross-referenced students’ financial circumstances (as reported in the Universities Australia survey) with their socio-economic status. They found that low socio-economic status students, in spite of their access to income support benefits, experienced more financial pressure than high socio-economic status students.

Eligibility criteria and policy drivers relating to the amount of income available to students under each of the income support schemes may be contributing to a situation where students receiving such support must still work significant additional hours in paid employment to survive. This affects their ability to devote time to study and engage with the university community, leading to poorer learning outcomes.

The James et al. (2007) student finances report found that students were very concerned about the impact engagement in paid employment was having on their studies. Over half of undergraduate and postgraduate part-time students indicated that their work commitments
adversely affected their performance at university, causing them to miss classes. Slightly lower but equally concerning proportions of full-time students reported similar issues. In addition:

- 7 per cent of undergraduates indicated that they could not afford the travel costs to get to their university campus;
- 9 per cent of undergraduate and 12 per cent of postgraduate students had previously deferred their studies, sometimes for several years, because they could not afford to continue studying at the time; and
- about 5 per cent of all students expected their financial circumstances might necessitate their discontinuing their course.

Not all respondents to the student finances survey would qualify for student income support in spite of their reported financial circumstances. But this report shows that for many students their performance is being jeopardised by the failure of the current student income support system and the consequent need to work long hours in paid employment. As a result, Australia’s ability to deliver both an outstanding educational experience and a student profile that is more representative of the profile of the general population is, in part, dependent on improving the levels of financial assistance.

### 3.3.3 Trends in student support

#### Numbers of students accessing support

The number of students on income support has declined in recent years from about 160,000 in 2001 to 148,000 in June 2007, while the take-up rate in the student population has decreased.

![Figure 12: Population, enrolment and income support changes, 2001 to 2007](image)

Source: ABS Census 2001 and 2006 data, Centrelink administrative data and DEEWR Higher Education Collection Student and Equity Indicator data 2008

The take-up rate for income support has declined from 41 per cent in 2001 to 33 per cent in 2007. Figure 12 shows that, while, the pool of potential recipients (numbers of undergraduate full-time domestic students and the number of low socio-economic status students) has slightly increased over this period, the number of students receiving income support has been decreasing (despite a small increase in 2006-2007). Moreover, the gap between the two is widening.
There has also been a change in the type of benefits taken up by students over this period. The largest reduction in the numbers receiving benefits has been in the Austudy group, representing mature-age students. However the overall number of younger students receiving Youth Allowance has also shown a downturn, despite slightly increasing in 2007. Since the number of mature-age students in undergraduate degrees has not declined over this period, this suggests an issue relating to the eligibility conditions of access to benefits.

Figure 13: Students receiving income support by type of support, 2001 to 2007

Source: Centrelink administrative data, 30 June each year.

Increasing proportions of Youth Allowance recipients are now in the ‘independent’ category as shown in Figure 14, while numbers of students in the ‘dependent’ category has declined since 1999. This suggests that the criterion relating to parental income testing may be preventing students who remain dependent (either living at or away from home) accessing benefits. It appears easier for students to demonstrate independence under the eligibility rules based on their own financial circumstances.

Figure 14: Youth Allowance recipients by independent status, 1999 to 2007

Source: Centrelink administrative data, 30 June each year.
The age of independence for both Youth Allowance and Austudy has been 25 years since 1998. Students below the age of 25 may claim independent status for a range of personal and economic reasons. However, about 80 per cent of those classified as independent do so by demonstrating financial independence from family after leaving school. No parental means test is applied to recipients satisfying this independence criterion. A particularly contentious provision is that students in this group can be eligible for ‘independence’ by earning $18,850 in a recent 18-month period, or by working a given number of hours in paid work over a specified period of time. These criteria can be satisfied by students other than low socio-economic status students, for example by taking a gap year and working in casual employment for that period or even being ‘employed’ by their families. Then, subject to waiting a further six months after the end of the gap year, they can satisfy the independence criterion.

The data shown in Figure 15, which relates eligibility for independent Youth Allowance to household income for those aged less than 25 years, demonstrate that there are students who have wealthier parents receiving Youth Allowance. Figure 15 attempts to measure the distribution of annual household income for a sample of students on Youth Allowance living at home. While many of this group would be receiving Youth Allowance because of low household incomes, it shows that 49 per cent of recipients are in households above the dependent Youth Allowance threshold of $80,000 and would therefore be in receipt of Youth Allowance as independent students. Indeed 36 per cent of the recipients in this sample lived at home in families where the household income was in excess of $100,000 (in 2008 terms) per annum (Chapman & Lounkaew 2008). This provides strong evidence that this aspect of student income support is quite poorly targeted and inequitable. Several submissions to the review have raised this matter and suggested that the eligibility criteria for independence be tightened to prevent this type of likely abuse. This problem of inequitable targeting applies also to the workforce participation criteria for independence, but not to students who have qualified for independence through other means, for example, having a child or being previously married.

The weaker test for eligibility under independence criterion was introduced at the same time as the age of independence was raised from 22 to 25 years in 1998. There is a relationship between these two criteria for eligibility for income support benefits. The number of students seeking to qualify for independence under the income criterion is very likely to be reduced if the age of independence were lowered from 25 years.

In 1992, Chapman indicated that over the period 1974 to 1990, the take up of income support increased quickly in the initial years of Austudy and remained at between 45 per cent and 50 per cent of all higher education students until 1990. While the figures are not directly comparable, they suggest that as a proportion of the overall student population, the current incidence of student support at around 33 per cent is considerably lower than previously.

Given the decline in the take-up rate compared with the past, changes need to be made to ensure that the rules for accessing support do not prevent deserving financially disadvantaged students from being assisted.
Figure 15: Annual household incomes of Youth Allowance recipients ‘living at home’ (in 2008 dollars)

Note: The data are individual observations of students surveyed from 2001-2007 in the Household, Income and Labour Dynamics of Australia (HILDA) survey. The household incomes have been converted to $2008 with the use of the AWOTE price index. The household incomes do not include monies received for Youth Allowance.

Source: Chapman and Lounkaew 2008

Size of the benefits received

The real value of the average amount of funds paid per recipient has been decreasing during the last five years. At present, the majority of recipients (over 62 per cent) receive payments of $200 or more per fortnight. The relatively high percentage of students in this group is due to the number of students obtaining independent status who access maximum benefits because they are not subject to a Parental Income Test. Students who are dependent and receive assistance come from very low-income families. They are likely to access benefits at maximum level. The existence of a taper rate in Youth Allowance payments has the effect of rapidly reducing the value of the allowance paid to applicants who are in the same family, moderating the average value of support provided. This taper rate applies for each child in the family unlike the rules associated with the Family Tax Benefit, for which the taper rate applies only once, irrespective of the number of children accessing benefits.

The average Youth Allowance benefit paid to full-time undergraduate students has declined by over 5 per cent in real terms over the last five years. Parallel drops have also occurred in the average annual stipend paid to full-time postgraduate research students receiving Australian Postgraduate Awards. The Review of the National Innovation System has recommended that the value of the stipend associated with Australian Postgraduate Awards be raised to $25,000 per year to address this decline in real value and to raise the amount to a level which allows a more reasonable standard of living for recipients. This is discussed further in Chapter 3.5.
Purchasing power of benefits

The purchasing power of the average income support payment has dropped significantly between 2000 and 2006, as shown in Figure 17, for all benefits and for Youth Allowance. Expressed in 2000 dollar values, the average Youth Allowance benefit in 2006 buys just under 73 per cent of what the corresponding benefit purchased in 2000. The corresponding figure for average overall income support benefits is 79 per cent.

Figure 16: Average Youth Allowance per annum (in real terms), full-time undergraduate students, 2001 to 2007

Source: Chapman and Lounkaew 2008

Figure 17: Purchasing power of student income support benefits, 2000 to 2006

Source: Calculated from Australian University Finances 2006, as shown in Chapman and Lounkaew 2008
There has also very likely been an adverse effect on the purchasing power of income support which can be traced in large part to the role of rent increases. Students living away from home are more likely to be using the majority of their incomes to pay rent. Calculations undertaken in Chapman and Lounkaew (2008) suggest that increased rent costs are likely to have had a significant adverse effect on the purchasing power of those on student income support, perhaps by as much as 10 per cent on average over the period 1998-2008, and nearly double this for those living in geographic areas in which rents have increased relatively rapidly such as Sydney, Canberra and Brisbane. As NATSEM noted in its report,

> While full-time students generally do not have the capacity to earn as much as people working full time, the costs of living they face are generally similar... While the average total income from all sources for full-time workers under 25 is $822 a week, the average total income of full-time students is less than a third of this at $269 weekly (NATSEM 2008).

Collectively, this data on the take-up rates, status of recipients and the size of benefits received show that the concerns expressed in a number of submissions to the review and in the surveys of student finances, particularly for low socio-economic status students and targeted disadvantaged groups, are real.

The current student support rules relating to indexation and threshold salary values are resulting in a significantly smaller proportion of the student population receiving assistance than that 15-18 years ago and in relatively reduced benefits compared with living costs. The detailed rules and eligibility criteria need to be reviewed urgently and changed for the goals of the income support scheme to be realised.

### 3.3.4 Scholarships

Assistance is also available to some financially disadvantaged university students through Commonwealth Education Costs Scholarships and Commonwealth Accommodation Scholarships at a total cost of about $114 million in 2008, as shown in Table 6. In addition 1,000 special Indigenous Access Scholarships are provided at a further cost of about $4 million. Universities are allocated the scholarships based on equity performance and the size of the institution via either a formula or a competitive bidding process. Not all universities have been able to award all of the scholarships allocated to them despite the number available across the sector representing only about 14 per cent of the number of low socio-economic status students, rural and Indigenous students enrolled.

Each university awards its allocation according to its own eligibility and selection criteria determined within Commonwealth Guidelines. These criteria vary but the guidelines recommend the use of receipt of student income support or a Centrelink benefit as a surrogate for financial disadvantage. Students are, therefore, often in receipt of both a Commonwealth Scholarship and an income support benefit. However, increasingly universities are defining more complex financial criteria as the basis of the award for the scholarships because there are concerns that there are students in genuine financial need not qualifying for income support benefits.
Table 6: Number and value of Commonwealth Scholarships, 2008

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Value ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Commonwealth Education Costs Scholarships</td>
<td>20,259</td>
<td>43.8</td>
</tr>
<tr>
<td>Ordinary Commonwealth Accommodation Scholarships</td>
<td>14,176</td>
<td>61.3</td>
</tr>
<tr>
<td>Associate degree Commonwealth Education Costs Scholarships</td>
<td>1,025</td>
<td>2.2</td>
</tr>
<tr>
<td>Associate degree Commonwealth Accommodation Scholarships</td>
<td>975</td>
<td>4.2</td>
</tr>
<tr>
<td>Indigenous Enabling Commonwealth Education Costs Scholarships</td>
<td>700</td>
<td>1.5</td>
</tr>
<tr>
<td>Indigenous Enabling Commonwealth Accommodation Scholarships</td>
<td>210</td>
<td>0.9</td>
</tr>
<tr>
<td>Indigenous Access</td>
<td>1,000</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>38,345</td>
<td>118.2</td>
</tr>
</tbody>
</table>

Source: DEEWR (Administrative data 2008)

The Government announced in the 2008 budget that the number of these scholarships would be increased to 88,000 overall by 2012. Two new scholarships will be introduced in 2009 – the National Priority Scholarships and the National Accommodation Scholarships. The former will target students enrolling in national priority area disciplines such as medicine, dentistry, allied health, education, nursing, physical science and information technology, and the latter will be for students relocating more than 100 kilometres in order to study the discipline of their choice when this is not available close to their home location. As some universities have been unable to award all of the scholarships allocated to them and significant unmet demand exists across the sector, the benefits of the additional scholarships may be lost unless management of the program is addressed to enable a better fit with demand for the scholarships and to allow a more targeted approach across the sector.

However, because the Commonwealth Scholarships program has failed to increase the participation rate of low socio-economic status or regional and remote students the panel considers the program needs more radical change.

3.3.5 International comparisons

Australia ranks fifth among OECD countries in terms of total public support for tertiary education students. This is the sum of income contingent loans, income support and scholarships. Direct public subsidies paid to households in support of participation in Australia were estimated at 0.37 per cent of GDP in 2004 compared with the OECD average of 0.25 per cent of GDP. However when the income contingent loans are removed from these statistics the picture is somewhat different. Based on income support and scholarships alone, Australia’s position in the OECD falls to 14th, just above the OECD average.

The OECD (2008a) also reports that Australia ranks 23rd among 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. Australian students generally face a much higher ratio of education costs to available sources of finance than their counterparts in other developed countries.
Figure 18: Public subsidies to households, including payments for student loans, 2005

Source: Calculated from Education at a Glance 2008: OECD Indicators, Table B5.2

3.3.6 What needs to be done

Higher education is becoming less affordable. The panel has concluded that the contributions made by students themselves through the income contingent loans scheme are currently appropriate and should not be increased any further. However, the arrangements for income support and publicly-funded scholarships need urgent attention.

Changing the scope and nature of the program

The student income support program is complex and difficult for students to navigate. The indexation arrangements and variable eligibility conditions are having unanticipated impacts on the number of students qualifying to receive benefits and the amount they receive. The amounts provided through the various benefit types are insufficient to live on. Some students and families are using other Centrelink benefits because they are more accessible than the standard student income support schemes. This is due to factors such as indexation and the taper rates for siblings.

At present Austudy and Youth Allowance are available to eligible applicants studying an undergraduate degree or a postgraduate certificate or diploma, but not generally for students enrolled in coursework masters degrees. The inclusion of some professional masters programs was introduced in 2007 and each institution must apply to have appropriate degrees recognised as eligible for Centrelink benefits. Over 300 masters coursework programs have now been approved for Centrelink benefits with more expected in 2009. It therefore seems reasonable that Centrelink benefits should be available for all masters coursework programs subject to students satisfying the usual eligibility conditions.
**Refining the targeting of the recipients**

Eligibility conditions for independence are inappropriate and the benefits are not going to the neediest students. These conditions must be changed, including the age of independence for all types of student assistance.

**Updating and changing the indexation arrangements**

The rates of indexation and frequency of adjustment have not been reviewed for some years leading to a relative lowering of the salary levels in the parental and personal income thresholds which have denied many students access to benefits. The income above which benefits are reduced with respect to the personal income test has not changed for 15 years. The thresholds are now about 70 per cent of what they would have been had they kept pace with actual average rates of salary increases over the period.

The value of the benefits is falling relative to average wages and some other non-study-related benefits. The average benefit rate is also reducing.

**Changing the management arrangements for scholarships**

One problem with the award of Commonwealth Scholarships is the timing of the notification to students of the awards. Students are generally enrolled before they are notified that they have been awarded a scholarship, although there is now agreement that universities must award the scholarships at the same time an offer of a university place is made. All providers must meet this requirement from 2010 (in practice, many are doing so now). This approach is consistent with improving access for low socio-economic status students, rural and Indigenous students who need certainty about the likelihood of receiving financial assistance for their studies.

The management arrangements for the program must be changed to address these and the problems identified earlier if the program is to be truly effective.

**3.3.7 Policies and strategies for the future**

While a number of other issues such as alignment of study related income support benefits with unemployment benefits, the level of benefit paid and the income bank arrangements have been raised by various groups in the submissions, the most pressing policy matters requiring review and resolution are:

- the parental income threshold is too low (that is, the criteria for qualifying for benefits is too tough). This is traceable to indexing and high taper rates;
- the personal income test is too tough (traceable to zero indexing since 1993);
- the age of independence is too high;
- the earnings independence criteria is inequitable;

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10 The Student Income Bank enables a recipient to earn credits when they have little or no income in a particular fortnight which can be used subsequently when the recipient has earnings above the income free area (of $236 per fortnight) to increase the amount they can earn before their income support payments are reduced. Students can accumulate any unused part of their fortnightly income free area up to a maximum of $6,000. This accumulated credit can then be used to offset higher income earned above the income free area in other fortnights such as increased earnings over extended holiday periods. When income received or earned is above the fortnightly income free area and Student Income Bank Credits are exhausted, income support payments are reduced by 50 cents in the dollar between $236 and $316, and by 60 cents in the dollar above $316.
Commonwealth Scholarships are poorly targeted; Commonwealth Scholarships need different administrative arrangements; and there are gaps in provision.

Because of the inter-relationships between the programs, making policy changes in one area has an impact on numbers of people qualifying for benefits in other ways.

**Overall rate of payment for benefits**

The survey of student finances shows clearly that students believe that the current level of support provided to eligible students is insufficient to live on. This is also supported in a number of submissions to this review. The data above shows the decline in the value of the benefits over time and the loss of purchasing power provided by them (Figures 16 and 17).

Currently the maximum benefit paid for Austudy and Youth Allowance is $9,266 per annum for a student living away from home with no dependants, well below the Henderson poverty line. It is time to restore the real value of the allowances to at least that of 2001. Even at these levels it will be necessary for recipients to have some additional income to manage independently. There are currently two reviews of social security benefits underway (the Henry and Harmer reviews) which may address some of the anomalies about size of benefits and indexation arrangements that have been identified. Given that the Harmer review is examining income support benefits of all types the panel has decided not to recommend a specific level of increase in the benefits at this stage, pending the report of its outcomes.

**Parental income means testing**

A significant reason the coverage of Youth Allowance for dependent students has fallen so steeply since the early 2000s is likely to be the indexation rule with respect to the Parental Income Threshold (PIT). Since the benchmark for qualifying for benefits is adjusted only by the Consumer Price Index (CPI), and earnings growth is higher than that over time, fewer people will be eligible for dependent Youth Allowance since fewer young people will be from households with these low and relatively falling incomes.

Two considerations for future policy are the extent to which there needs to be a one-off adjustment to the Parental Income Threshold (by some percentage, e.g. 15 per cent), and having a new indexation arrangement on Parental Income Threshold related to changes in earnings. The Family Tax Benefit (Part A), which some families use to support students enrolled in higher education, even though this benefit is not study-related, has a much higher threshold than that of Youth Allowance, and a more generous indexation rule. The Parental Income Threshold for the Family Tax Benefit is $42,559 compared with $31,400 for the Youth Allowance and ABSTUDY.

The preferred solution to this is to align the Parental Income Threshold with the income threshold of the Family Tax Benefit. In addition, the indexation rate needs to be changed. Again aligning this with the Family Tax Benefit makes sense. It is proposed, therefore, that in future the Parental Income Threshold should be indexed by a combination of CPI and Male Total Average Weekly Earnings (MTAWE). The impact of this is estimated to be an increase to benefits for about 35,000 current Youth Allowance recipients with a further 30,000 current Family Tax Benefit recipients moving to Youth Allowance.
The taper rate for benefits for multiple students in a family

For families with incomes in excess of the Parental Income Threshold amount benefit payments are withdrawn at a rate of 25 per cent for each child until it is depleted. This per child taper rate is quite steep at 25 per cent and is applied for each child in the family receiving benefits. This is compared with a lower taper rate of 20 per cent for the Family Tax Benefit which is applied only once irrespective of the number of children in the family. When combined with the Parental Income Threshold indexation rule the result is relatively low and falling assistance and coverage.

Aligning the Youth Allowance and the Austudy taper rates with those of the Family Tax Benefit makes sense to avoid the inconsistencies of treatment which have led to shifts away from the student income support schemes into Family Tax Benefits. Reducing the taper rate from 25 per cent to 20 per cent for these benefits will result in about 33,000 current Youth Allowance customers receiving a higher payment and the movement of a further 14,000 Family Tax Benefit recipients to Youth Allowance.

Personal income means testing

The personal income test for Youth Allowance, ABSTUDY and Austudy is also too severe. Most significantly, the maximum amount that can be earned without recipients losing some Youth Allowance benefit, currently set at $236 per fortnight, has not been indexed at all since 1993. This implies that it has effectively decreased by around 80 per cent in this time. This has had a large impact on the number of students qualifying for an allowance on the basis of their own income and explains some of the large numbers of rejections received by postgraduate coursework students. Applying an index which relates to average weekly earnings suggests that the personal income threshold of $236 per fortnight should now be about $400 per fortnight.

Independence criteria

Independence status under Youth Allowance disregards parental income and asset tests in assessing an individual’s eligibility and the rate of payment. The criteria for independent status are not related to whether the young person is living at home or away from home (however independent students living with their parents receive a lower rate of payment than if they live away from home).

There are two broad categories for establishing independence under Youth Allowance. Youth Allowance rules recognise that some young people will establish independence through individual circumstances such as marriage, being orphaned, having a child, being a refugee, or having parents who cannot exercise their responsibilities.

Youth Allowance rules stipulate that some young people can achieve financial independence from their parents by meeting the workforce participation criteria. To be eligible under these criteria, the young person must meet one of the following requirements:

- they have worked full time for a minimum of 30 hours a week for at least 18 months in a two-year period; or
- they have worked part time for at least 15 hours a week for at least two years since leaving school; or
• they have earned, in an 18-month period since leaving school, an amount equivalent to 75 per cent of the maximum rate of pay under Wage Level A of the Australian Pay and Classification Scale generally applicable to trainees (in 2008 this requires earnings of $18,850).

The vast majority of students become eligible for independence under Youth Allowance by meeting the third criterion (earning $18,850 of income over an 18-month period). Evidence from submissions and the data presented earlier show that this rule should be changed to ensure benefits are targeted to those in greatest need.

Evidence of independence should be based on the demonstration that a young person has established such independence from their parents by being engaged in employment that has resulted in genuine self support over time.

Removal of the second and third criteria of the workforce participation criteria for Youth Allowance recipients would not affect those who are genuinely independent and would result in better targeting of income support funds. Considerable savings would be achieved if this were done, because of the large numbers achieving independence under these two elements of the workforce participation criteria, particularly the third criterion. Existing students who have already satisfied the criteria for independence would have their present benefits preserved until they finished their course. Changes to the workforce participation criteria are suggested in the context of changes to the age of independence for Youth Allowance. If this were changed, around 27,000 prospective Youth Allowance claimants would not qualify for benefits, and a further 7,000 current recipients would not become eligible for a higher rate of allowance.

The age of independence at 25 years for access to Youth Allowance is very high by international standards and could be encouraging the adverse behaviours referred to above. The National Union of Students has advocated in its submission that the age of independence be lowered to 18 years. Changing the age of independence has a significant impact on the numbers of students eligible for Youth Allowance, but if lowered sufficiently would also be likely to reduce the number of students seeking independence though other avenues. Table 7 shows the increase in the cost associated with dropping the age of independence from 25 years to various years.

The cost of reducing the age of independence to 18 years is prohibitive given other priorities, but significant benefits can be achieved by reducing it to 22 years, the level it was until 1998, when it was increased to 25 years. This is the preferred option of the panel. In addition to the 19,000 new recipients, a further 5,000 will benefit by being paid a greater level of benefit.

Table 7: Estimated cost of reducing the age of independence

<table>
<thead>
<tr>
<th>New age of independence</th>
<th>New Youth Allowance recipients</th>
<th>Cost per year ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>3,000</td>
<td>16.3</td>
</tr>
<tr>
<td>23</td>
<td>8,000</td>
<td>37.5</td>
</tr>
<tr>
<td>22</td>
<td>19,000</td>
<td>87.5</td>
</tr>
<tr>
<td>21</td>
<td>54,000</td>
<td>262.5</td>
</tr>
<tr>
<td>18</td>
<td>404,000</td>
<td>1,850.0</td>
</tr>
</tbody>
</table>

Source: DEEWR 2008 administrative calculations
Treatment of masters degree students

The current approach for providing income support for masters degree students is unwieldy to administer, with institutions having to make a case for inclusion of each professional masters course to the Department of Education, Employment and Workplace Relations before students can access support. In addition, the lack of availability of student income support for students studying at this higher level discourages them from continuing with postgraduate degrees.

Given the desire to have a more highly educated workforce and to encourage lifelong learning as a means of upskilling the population, it is appropriate to extend the current provision of student income support benefits to students in all postgraduate coursework programs. The eligibility requirements would be the same as those applying for other lower level courses.

Inadequacy of payments to cover living and other tuition expenses

Several submissions, including that of the National Union of Students, have suggested that consideration should be given to providing an optional income contingent loan to cover expenses such as the purchase of books and equipment.

A possible way to address these issues is to introduce an optional income contingent loan which could be added to the HELP debt and paid back after the HECS-HELP and FEE-HELP debts are paid off. This was considered and its costs modelled but it is prohibitively expensive and the introduction of means testing will change the basic nature of these loans and affect the conceptual integrity of the HECS system. Consequently, the panel is not recommending the introduction of an income contingent loan for these expenses.

Scholarships

Commonwealth Scholarships are not scholarships in the traditional sense as they are not awarded to encourage students to enrol in higher education. They are an additional benefit paid to students who are usually on some other form of student income support to assist them with their study and accommodation costs. The program should be retained and enhanced.

However, it should be run centrally with assessment of applicants being handled by Centrelink so that demand from potential recipients can be addressed in a consistent way against a single set of criteria. In this way eligibility criteria can be simplified and consistency ensured in the provision of benefits to students of different institutions. It would also align the award of scholarships with demand for them across the sector. It would be easier for students to access the benefits and would reduce the considerable administrative load on higher education institutions in selection, payment and management of the scholarships program.

Indigenous scholarships

In recognition of the special needs of Indigenous students, the Indigenous Higher Education Advisory Council has sought flexible arrangements for assessing the eligibility of students for Indigenous-specific Commonwealth Scholarships. This would enable the assessment to include a judgment about the individual circumstances of the student and be undertaken in a culturally appropriate way. The council has argued that the assessments should be made in consultation with the institution’s Indigenous-support centre.
The panel has concluded, therefore, that these scholarships should be kept separate from the other types of Commonwealth Scholarships and that responsibility for the assessment and payment of these scholarships should rest with individual higher education providers. The existing arrangements for Indigenous students who receive Indigenous Enabling Scholarships to be eligible in future years for ordinary Commonwealth Scholarships should continue.

Indigenous staff scholarships should also continue in their current form.

**Addressing gaps in current provision**

Apart from the issue of students on benefits not receiving sufficient income to pay for their basic living and study expenses there are some groups of students who incur additional costs associated with their studies because of their particular circumstances. These groups include:

- students who need to attend extended practicums as part of their training. These students often are required to move away from their home to country locations and suffer loss of income and have accommodation costs that are higher than at their home base;
- students who need to move away from the parental home to another part of Australia will face high moving costs that cannot always be supported by parents; and
- mature-age workers wishing to retrain who have difficulties because of high living costs associated with having dependants (Austudy is not adjusted for more than one dependant, although the Family Tax Benefit takes this into account somewhat).

There are two possible options to address these problems, although neither is supported without qualification by the panel, and important additional consideration by the government is required. The first relates to those who qualify for income support. This involves a trade-in of some Youth Allowance, Austudy or ABSTUDY benefits for more funds provided through an income contingent loan, such as FEE-HELP. This could provide eligible students with funds to meet particular needs at low cost to the budget (Chapman & Lounkaew 2008). A scheme of this type was tried from 1994 to 2003, but it was not well designed. In its submission, the National Union of Students criticised the design weaknesses of the old scheme and there is undoubted validity to these criticisms (Chapman & Lounkaew 2008). On the other hand, there are the advantages that a trade-in could help those in high rent areas, those needing to do less paid work and those needing to help finance the situations described above.

The Student Loan Supplement Scheme, as it was called, allowed students to trade $1 of income support benefit for $2 of income contingent loan. This ratio of 1:2 was ungenerous and expensive for students as the loan had to be repaid at the same time as the normal HECS debt rather than being added to the total amount owing. Hence it was not attractive. A new scheme could have the following characteristics:

- a more generous ratio of 1:3;
- the debt to be added to the student’s existing HECS-HELP or FEE-HELP debt and so would be paid at the end of the tuition-fee debt and not in parallel; and
- a cap of a maximum of, say, $750 that could be traded in per year.
Chapman and Lounkaew (2008) illustrate that such a scheme would have very low subsidies from the Commonwealth budget, although additional up front funding would be needed in the short run. While the re-establishment of such a scheme with different parameters has conceptual merit and would address some of the gaps in the current income support system without adding major costs to the Government in income support provision, it is not recommended in the absence of further consideration of its implications.

A second possible option involving the use of FEE-HELP as an instrument for additional income support has emerged, with additional resources of the order of $1,000 per annum being suggested. This option is favoured with qualifications by the National Union of Students and others, in submissions, and in some public commentary (for example, from Universities Australia). The advantages of such an approach are:

- the long-run costs to the Commonwealth Budget would be minimal (Chapman & Lounkaew 2008);
- the additional funds could be used to alleviate the up-front funding costs associated with some of the issues noted above, an option not part of the HELP system which only covers tuition costs; and
- since the scheme is voluntary, by taking up the offer students would not be made worse off, and there would be no off-setting reductions in the grant parts of income support.

On the other hand, the panel highlights some important unresolved issues related to this option. They are:

- while it is very likely to be the case, as argued in Chapman and Lounkaew (2008), that there are minimal taxpayer subsidies from such an arrangement, it is still true that – unlike with HELP – the government would need to finance the initial outlays for the scheme, and these might be relatively high;
- one way to mitigate the initial outlay costs would be to restrict eligibility for the FEE-HELP income support assistance through means testing on the basis of household income; however, this would arguably introduce an element of means testing into the HECS system and this is generally considered to be undesirable (Chapman & Lounkaew 2008); and
- in administrative terms, it is not clear how this would be delivered, and how high the administrative costs would be; one possibility would be to have the resources distributed through Centrelink, and another might be to have support distributed on enrolment by higher education institutions. No assessment has been made of the relative merits of these alternative approaches.

On balance, while the advantages of extending income support with the use of income contingent loans is conceptually attractive there are currently important questions associated with how this might best, and most equitably, be adopted.

The panel is not drawn to making recommendations on the introduction of a loans-supplement scheme or using FEE-HELP as an instrument for income support on the basis of the information available to it at this stage. However, these are matters which would benefit from further consideration and more detailed analysis of their impact on students.
3.3.8 Recommendations

It is vitally important to change the higher education student income support system to ensure that financial barriers to participation of students from low socio-economic backgrounds and Indigenous students are removed. The system has become ineffective and not sufficiently targeted due to lack of attention to the impact of particular indexation decisions and the absence of regular review since its introduction in the current form in 1998. The following recommendations address the need for major change and for instituting a program of regular review to maintain efficiency and effectiveness over time.

Recommendation 5
That the Australian Government introduce the following package of reforms to the student income support system.

<table>
<thead>
<tr>
<th>Item</th>
<th>Nature of the reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Income Test threshold</td>
<td>Increase threshold for Parental Income Test to $42,559, consistent with the value used for the Family Tax Benefit.</td>
</tr>
<tr>
<td>Parental Income Test indexation</td>
<td>Change the indexation rate to be consistent with the Family Tax Benefit index, a combination of CPI and Male Total Average Weekly Earnings (MTAWE).</td>
</tr>
<tr>
<td>Parental Income Test taper rate</td>
<td>Change the taper rate for reduction in benefits for each child in the family on income support benefits to 20 per cent.</td>
</tr>
<tr>
<td></td>
<td>Apply the new taper rate only once as is the case for the Family Tax Benefit rather than for every child in the family receiving benefits.</td>
</tr>
<tr>
<td>Personal Income Test threshold</td>
<td>Increase the personal income threshold for Youth Allowance and Austudy to $400 per fortnight.</td>
</tr>
<tr>
<td>Personal Income Test indexation</td>
<td>Change the indexation of the personal income threshold from zero to a wage basis (for example, Male Total Average Weekly Earnings).</td>
</tr>
<tr>
<td>Age of independence</td>
<td>Reduce the age of independence for Austudy from 25 to 22 years.</td>
</tr>
<tr>
<td>Change to eligibility conditions for independence</td>
<td>Remove the workforce participation criteria for independence of:</td>
</tr>
<tr>
<td></td>
<td>(a) working part time for at least 15 hours per week for at least 2 years; and</td>
</tr>
<tr>
<td></td>
<td>(b) earning a specified amount in an 18-month period since leaving school.</td>
</tr>
<tr>
<td></td>
<td>Introduce ‘grandfathering’ arrangements for existing students who have already satisfied these criteria for independence.</td>
</tr>
<tr>
<td>Eligibility of masters coursework students</td>
<td>Extend eligibility for benefits to students enrolled in all masters by coursework programs.</td>
</tr>
<tr>
<td>Enhance the Commonwealth Scholarships program</td>
<td>Continue and enhance the Commonwealth Scholarships program by providing benefits to all eligible students on Austudy or Youth Allowance for education costs and accommodation costs (for those who need to leave home) and by transferring responsibility for the payment of benefits to Centrelink.</td>
</tr>
</tbody>
</table>

* Based on recent costings from DEEWR, attached as Appendix VIII. Please note the caveats provided for these estimates. ** The aggregate costings do not include estimates of potential savings associated with the trade-in.
Recommendation 6
That the Australian Government undertake a regular process of triennial review of the income support system to assess the overall effectiveness of the support payments in reducing financial barriers to participation of students in need.
3.4 Providing students with a stimulating and rewarding higher education experience

3.4.1 Why a high-quality student experience is central to the future of higher education

The Australian student body is highly diverse and changing rapidly. The traditional image of a higher education student moving straight from secondary schooling and devoting all his or her time to studying full time on campus is becoming far less the norm. For example, many students study full time while working part time, while others study part time and hold down a full-time job. There is a large and increasing cohort of mature-age students, with a significant proportion who study by distance education and may only visit a campus to receive their final award. In addition, a very substantial proportion of the Australian student body now comprises international students.

In this diverse and complex environment, providing all students with a stimulating and rewarding higher education experience is a significant challenge. However, the future success of the Australian higher education system is inextricably linked with its ability to meet this challenge.

A good student experience is important because students are more likely to complete their studies if they are satisfied. In addition, they are more likely to return to study if they have had a positive experience previously – an outcome which is necessary if Australia is to meet its productivity goals.

The most effective way to ensure that students enjoy a stimulating and rewarding educational experience is to encourage Australia’s higher education sector to be responsive to student demand. Students should be given the opportunity to select the most appropriate institution for themselves and higher education providers should have the flexibility to respond to that demand and to be rewarded for the quality of their teaching and research.

3.4.2 Factors affecting student experiences and expectations

Student expectations about their higher education experience

There is a strong link between students’ retention and success and the extent to which they are engaged with their fellow learners and their teachers during their studies. Factors influencing the extent of engagement include ‘the social climate established on campus, the academic, social and financial support provided by the institution, student in-class and out-of-class involvement with campus life, and frequent feedback provided to students and staff about their performance’ (Scott 2008, p. 32).

In a literature review on student engagement and satisfaction undertaken for the review, Professor Geoff Scott found that ‘some expectations that students have about their university studies are enduring and are common for most student groups’ (Scott 2008, p. 24).
These include:

- an expectation of personal and vocational relevance and coherence in what is studied and assessed and the capacity to be appropriately employed on graduation;
- ease of attendance;
- experiencing a responsive learning environment;
- clear assessment guidelines; and
- prompt and helpful feedback on their learning (Scott 2008).

These core expectations about the student experience are tested in some of the instruments currently used in the sector to seek feedback from graduates about their course and study experience and these are discussed later in the chapter.

The changing student profile

Substantial changes in the profile of the higher education student population have occurred over the last decade resulting in increased diversity. There have been shifts towards postgraduate enrolment, international enrolment, and increasing numbers of mature-age students. Different types of students have different needs and expectations of their higher education experience. For example, high proportions of international students study full time and are generally heavier users than domestic students of various social and support services provided on campus. The increasing numbers of older part-time students enrolling also have different expectations about the quality of their education and the interactions they will have with their peers and staff. In turn, those expectations are different from those of the younger cohort.

Table 8: Comparison of higher education student profile 1996 and 2007

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>1996</th>
<th>2007</th>
<th>1996 % of total profile</th>
<th>2007 % of total profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduate students</td>
<td>132,444</td>
<td>278,257</td>
<td>20.7%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Undergraduate students</td>
<td>496,227</td>
<td>720,003</td>
<td>77.7%</td>
<td>69.9%</td>
</tr>
<tr>
<td>Domestic students</td>
<td>584,476</td>
<td>756,747</td>
<td>91.5%</td>
<td>73.5%</td>
</tr>
<tr>
<td>- Full-time students</td>
<td>340,333</td>
<td>481,140</td>
<td>53.3%</td>
<td>46.7%</td>
</tr>
<tr>
<td>- Part-time students</td>
<td>244,143</td>
<td>275,607</td>
<td>38.2%</td>
<td>26.8%</td>
</tr>
<tr>
<td>International students</td>
<td>54,020</td>
<td>273,099</td>
<td>8.5%</td>
<td>26.5%</td>
</tr>
<tr>
<td>- Full-time students</td>
<td>37,986</td>
<td>218,867</td>
<td>5.9%</td>
<td>21.3%</td>
</tr>
<tr>
<td>- Part-time students</td>
<td>16,034</td>
<td>54,232</td>
<td>2.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Mature-age students (21 or over)</td>
<td>402,884</td>
<td>682,225</td>
<td>63.1%</td>
<td>66.2%</td>
</tr>
<tr>
<td>External (off-campus) students</td>
<td>85,938</td>
<td>130,277</td>
<td>13.5%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Multi-modal students</td>
<td>17,508</td>
<td>71,386</td>
<td>2.7%</td>
<td>6.9%</td>
</tr>
<tr>
<td>All students</td>
<td>638,496</td>
<td>1,029,846</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * Coverage is limited to what are now Table A providers

Source: DEEWR (Selected Higher Education Statistics, various years)
Increased student expectations about value for money

Students expect the quality of teaching and services will be commensurate with the relatively high fees and personal financial contributions they make to their education. Various changes to the rates of HECS and other fees and charges over the last decade or so have significantly increased the cost of higher education to participants and reinforced student perceptions that they are customers with a right to good service.

Students also expect that higher education providers will accommodate pressures outside of study, such as paid employment and meeting family responsibilities, through the flexible delivery of teaching, services and advice.

Changes in the sector affecting the quality of the student experience

Despite the enduring and common nature of some expectations, a number of issues in relation to the operations of universities have affected students' educational experiences.

Student-staff ratios

Figure 19 shows the large increases in student-staff ratios experienced in universities since 1990 associated with the transition to a much larger higher education system. The ratio rose sharply between 1996 and 2001 and is now over 20:1. The student-staff ratio includes casual staff involved in teaching and those numbers have also risen over the last decade. Hence the mix of staff contributing to the ratio has changed and there are now relatively fewer full-time staff involved in teaching or in the delivery of courses.

Research has argued that the use of casual staff is damaging the quality of teaching at Australian universities because of the lack of effective training opportunities for casual academics; ‘inconsistent management and supervision of casual staff; and a lack of integration and inclusion of casual staff in faculty arrangements’ (Brown, Goodman & Yasukawa 2008).

There is a limit to how far improving productivity performance by increasing student-to-staff ratios can go without damaging student outcomes. In submissions to the review from student groups, a very significant number reported negatively on aspects of the student experience, including many who complained that in their university class sizes were too large.

There is evidence from the United States that increasing class sizes have a negative impact on student learning outcomes. Kokkelenberg, Dillon and Christy (2006, p. 2) found that average grade points declined as class size increased, ‘precipitously up to class sizes of twenty, and gradually but monotonically through larger class sizes’. They also quote from other work that found smaller class sizes were significant in ‘courses geared toward promoting critical thinking and advanced problem solving’ (McKeachie, Iran-Nejad & Berliner 1990, cited in Kokkelenberg, Dillon & Christy 2006, p. 5).

Taking all these matters into account, the panel has concluded that student-staff ratios in Australian universities have reached a point where the student experience is being threatened. This situation cannot continue without jeopardising the quality of the teaching, and the programs and learning support provided to students. Student-to-staff ratios will therefore need to be reduced as a matter of priority.

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11 At present, systematic public information about student satisfaction with their higher education experience is largely limited to surveys of university students.
The influence of information and communication technologies on teaching, learning and administration

The new information and communication technologies (ICT) play a significant role in teaching, learning and administrative support in universities, with most students reporting using ICT in some form in each of the subjects they study. While students generally are in favour of the use of ICT to enhance the learning experience and to provide flexibility, face-to-face teaching and learning remains highly valued.

There is debate about the impact of a heavy reliance on information and communication technologies on the quality of teaching delivered and the learning experience of students. Most research indicates that students respond best to a broad mix of learning tools and resources. However, significant use of technology-mediated methods may disadvantage students from backgrounds poor in information and communication technologies (Scott & Alexander 2000). This could have a greater effect on mature-age students who may not be as computer literate as younger students and also on students from rural and low socio-economic backgrounds who may not have access to appropriate resources or infrastructure.

Removal of compulsory non-academic fees

The abolition of compulsory non-academic fees in universities in 2005 has led to a reduction in the range of support services provided to students in some universities. Many submissions to the review commented on this issue.
3.4.3 Measuring the student experience and its quality

**General outcome indicators**

The effectiveness of teaching in universities and satisfaction of students with their learning experience can be partially measured by examining employment and study-outcome trends.

All public universities in Australia participate in the national Graduate Careers Australia surveys which collect information from recent graduates about their employment and future study outcomes (the Australian Graduate Survey).

As shown in Table 9, there has been an increase of 39 per cent in the number of completing undergraduate students between 1997 and 2007. The proportion of graduates in employment or further study has also improved by 2 per cent over the last decade. The proportion of graduates in full-time employment within four months of completing their degrees rose by 6 per cent. However, the panel has detected during consultations disquiet about both quality and sustainability.

| Table 9: Selected student outcome indicators for undergraduates, 1997 to 2007 |
|-----------------------------|-----------------|----------------|----------------|
| Indicator                   | 1997            | 2007            | % change       |
| Undergraduate outcomes      |                 |                 |                |
| % in Full-time employment   | 53.2            | 56.7            | 6              |
| % in Part-time or casual employment (includes seeking full-time and not seeking full-time) | 15.1 | 15.1 | 0 |
| % in Full-time study        | 21.5            | 19.9            | -7             |
| Total positive outcomes     | 89.8            | 91.7            | 2              |
| Completions                 | 103,834         | 144,040         | 39             |
| Total enrolments            | 496,364         | 690,393         | 39             |
| Completions as % of total enrolments | 21 | 21 | 0 |
| Demand from International students (International students enrolled) | 44,399 | 146,469 | 230% |

**Note:** Includes bachelor level qualifications only

*Source: Graduate Careers Australia 1999, Grad Files, Number 1, December 1999; Graduate Careers Australia 2007a, Graduate Destination Report from the Australian Graduate Survey; DEEWR student statistics collection.*

**Perceptions of the quality of teaching and support**

All public universities in Australia take part in the Graduate Careers Australia Course Experience Questionnaire (CEQ) which asks recent graduates to reflect on their experience of the course they have completed and to indicate their levels of satisfaction with various components of the teaching and support they have received. This covers areas such as the nature of the learning experience, whether workload levels hindered deeper forms of learning and the impact of the course on the desire to continue learning.
The results, shown in Figure 20, indicate relatively low levels of graduate satisfaction with teaching and student support services. However, one of the anomalies of the CEQ data can be observed. Overall satisfaction levels, at between 60 to 70 per cent for the last decade, are often at odds with much lower levels of satisfaction for the other more specific scales.

Satisfaction levels should be at least 66 per cent for one to be confident that the majority of students felt positively about their experience of higher education. The levels for most scales are well below that benchmark. Only 5 of the 11 scales have shown improvement between 1996 and 2007 and, in particular, levels of satisfaction on the good teaching, appropriate workload, clear goals and standards, and learning community scales have remained either about or below 50 per cent for this whole period.

![Figure 20: CEQ percentage agreement by scale, Australian higher education, 1996 to 2007](image)

While the panel acknowledges the need for care in interpreting these indicators, these results seem to suggest that the greater productivity and outputs of the sector shown in the previous section are being achieved at the expense of time spent with individual students, good feedback on assessment and social interactions.

**International comparisons**

The sector must benchmark its performance against that of other countries. To date most of the focus has been on comparing performance between universities or measuring improvement year-to-year without reference to how performance compares with other countries. Recently such comparisons have become possible.
United Kingdom

The United Kingdom adopted the Course Experience Questionnaire in 2005 and administers it to students in their final year of study. Figure 21 shows the outcomes from the surveys in Australia and in the United Kingdom for seven comparable items in 2006.

In five items the performance of United Kingdom teachers is better than their Australian counterparts. Only for the helpful feedback question does Australian performance exceed that of teachers in the United Kingdom. For the item about staff are good at explaining things, the level of satisfaction in the United Kingdom is 35 per cent higher than for Australian students.

Figure 21: CEQ results for Australia and the United Kingdom for comparable items, 2006

The question on overall satisfaction is the same in the two countries, but the United Kingdom results in each of the years 2005-2007 for which comparative data exists, is between 14 per cent and 15 per cent higher than the percentage agreement achieved in Australia.

Given the slow rate of improvement in these items, it will be a long time before the Australian results are comparable to those achieved in the United Kingdom unless action is taken. A better understanding of why this differential exists, and significant intervention to address the reasons, are needed urgently.

United States and Canada

The Australasian Survey of Student Engagement (AUSSE), based on the College Student Report used in the United States National Survey of Student Engagement, has been developed and piloted by the Australian Council for Educational Research to explore the extent to which students are engaged with their community during their higher education experience. The AUSSE was administered to a sample of 20 Australian and five New Zealand universities in 2007 and provides some useful benchmarking data for international comparisons with United States and Canadian universities. Scores reported are the average of the responses received and range between 0 and 100.
The AUSSE data for the 20 Australian institutions which participated in the trial of the survey instrument show that:

- the mean scores for the various scales range from 21.3 to 50.4. These are generally very low levels of satisfaction;
- the lowest scores are in the areas of student and staff interactions (21.3) and enriching educational experience (25.5);
- in general, first-year students rated each of the scales lower than the ratings by second- and later-year students;
- full-time study and on-campus study are predictors of the degree of participation by students in active learning and enriching educational experiences; and
- greater participation in off-campus paid work is associated with roughly the same level of engagement in other activities, except for those working more than 30 hours per week (ACER 2008).

Detailed analysis of the components for each of the scales in the AUSSE report shows significant variability in ratings within the scales.

The AUSSE trial results in 2007 are compared below with those of the United States and Canada (combined).

![Figure 22: AUSSE outcomes for Australia, New Zealand & the United States/Canada, 2007](source: ACER 2008, AUSSE Australasian University Scale Statistics Report, January, p. 43)

The Australian results are well below those of the United States and Canada for every scale, although slightly above those of New Zealand in most categories. The greatest disparities are for the student and staff interaction and enriching educational experiences scales. The former is likely to result from the increasing student-staff ratios in universities in Australia.
3.4.4 What has been done to improve the quality of teaching and learning in Australia?

Various initiatives are currently in place in the sector to address the quality of teaching and learning. These include the Australian Learning and Teaching Council and the Learning and Teaching Performance Fund.

The Australian Learning and Teaching Council

The Australian Learning and Teaching Council (previously known as the Carrick Institute for Learning and Teaching in Higher Education) was established in 2005 and aims to enhance learning and teaching in higher education through:

- management of a major competitive grants scheme for innovation in learning and teaching;
- improvement of assessment practices throughout the sector, including investigation of the feasibility of a national portfolio assessment scheme;
- facilitation of benchmarking of effective learning and teaching processes at national and international levels;
- development of mechanisms for the dissemination of good practice in learning and teaching;
- management of a program for international experts in learning and teaching to visit Australian higher education providers and the development of reciprocal relationships with international jurisdictions; and
- coordination of the Australian Awards for University Teaching.

The council undertakes a range of activities to support these aims including fora and symposia on key teaching issues, national teaching awards, a fellowship program to promote excellence in teaching and learning, a national grants scheme for leadership and innovation in learning and teaching, a learning network of academics and special projects.

Submissions to this review that commented on the council were generally very supportive of its work to date and argued that it had been effective in raising the profile of teaching and learning in the sector generally and should be continued.

A review of the council was undertaken by Professor Kwong Lee Dow during 2008. He found that the council was well-established and valued within the higher education sector, and had assisted in developing an increased prominence for learning and teaching in the sector.

The review recommended no major changes to the mode of operation or focus of the council (Lee Dow 2008). The panel supports his conclusions and agrees that the council should continue to play a significant role in the further improvement of Australian higher education teaching and learning.
The Learning and Teaching Performance Fund

The Learning and Teaching Performance Fund has encouraged the sector to focus on teaching and learning. However, views expressed in submissions to this review on the effectiveness of the fund were divided.

The methodology used to allocate money from the fund has been problematic and the subject of considerable negative comment by many. A positive aspect of the fund, though, has been the calculation and publication of a set of key performance indicators used to assess the quality of teaching. The publication of these indicators has drawn attention to institutional performance and has enabled development of targeted responses and initiatives.

These indicators can now form the basis of an expanded and refined set of performance measures to provide a greater focus in institutions and in the sector generally on the quality of the student experience. The panel has concluded that transparent, public reporting of such data on an annual basis will be effective in providing this focus but it does not support the continuation of the fund in its current form.

3.4.5 Key challenges and strategies for the future

Australia has now fallen behind its major competitor countries on key teaching and student experience indicators. This leads to a number of challenges which must be addressed to improve the quality of teaching and the student experience for the future by:

- improving the engagement of students with their learning environment; and
- developing a comprehensive approach to measuring and monitoring the level of student engagement and the total student experience.

Maintaining and improving the quality of teaching and learning will be a critical factor in the future success of universities and all other higher education providers. Students must be provided with the highest quality teaching and learning and a stimulating and rewarding higher education experience.

Improving the engagement of students with their learning environment

Institutions must better prepare students for the higher education experience upon commencement and then later monitor their levels of satisfaction against expectations. Student expectations will differ depending on the characteristics and background of the individual but at a minimum it is reasonable for students to expect that their experience of higher education will include the characteristics outlined in the box below.

Measuring and monitoring the level of student engagement

Student engagement is an important aspect of the quality of the learning experience and hence the quality of teaching. Institutions should monitor the perceptions of their students about the quality of teaching and support they receive and these results should be publicly available. Any framework for assessing institutional performance should include measures relating to the quality of teaching and the extent of student engagement in their education.
A quality student experience in higher education

- Access to well-designed and engaging courses that lead to good vocational outcomes.
- Teachers who are accessible and responsive to learners.
- Interaction with teachers that builds a commitment to the students’ chosen disciplines.
- Good-quality teaching and learning spaces and library and information technology support.
- An accessible and sophisticated online learning environment.
- Responsive administrative and student support services.
- Being treated as an individual.
- Two-way communication about matters that pertain to their academic progress.
- Physical places and facilities that allow informal socialisation.
- Presence of a supportive peer group.
- Access to extra-curricular activities such as clubs and societies.
- A welcoming and inclusive environment.

Australia was once a world leader in the measurement of student perceptions with the development and introduction of the Course Experience Questionnaire in 1993. However, it is now time to review the approach to measuring student engagement to take account of new approaches and in particular to collect better information about the broader student experience.

The AUSSE survey piloted in 2007 is an example of an instrument that provides information on the student experience at a more forensic level than is currently available from the Course Experience Questionnaire.

As part of the accountability requirements of accredited higher education providers, more information should be available in the public domain about the Course Experience Questionnaire, Graduate Destination Survey and AUSSE outcomes for each institution. At present this detailed information is only available through the Good Universities Guide for some institutions. Information about institutional performance should be published on the Going to Uni website as well as broad details of actions taken by institutions to address issues identified through student feedback.

**Measuring and monitoring the quality of teaching and learning**

The panel has concluded that a comprehensive set of measures of the quality of teaching and learning should be developed. These should include measures of the student experience and form part of a broader accountability framework that is focused on the achievement of outcomes. This framework is discussed in more detail in Chapter 4.2 but a possible set of indicators relating to the quality of teaching and the broader student experience are outlined below.
Possible indicators of teaching quality for annual monitoring

- The survival rate – the proportion of a commencing cohort still enrolled in the sector.
- The completion rate – the proportion of students completing in less than or equal to minimum time plus two years.
- Student perceptions of the quality of the teaching they received in their course.
- Student perceptions of the quality of support services provided.
- Student perceptions of the quality and effectiveness of their interactions with staff (as measured through the CEQ and the AUSSE).
- Employment and study outcomes experienced by graduates.

Recommendation 7
That the Australian Government require all accredited higher education providers to administer the Graduate Destination Survey, Course Experience Questionnaire and the Australasian Survey of Student Engagement from 2009 and report annually on the findings.
3.5 Playing a vital role in the national research and innovation system

Responsibility for research and research training in higher education lies with the Minister for Innovation, Industry, Science and Research, the Hon Senator Kim Carr, who commissioned the Review of the National Innovation System and released its report in September 2008. This contains a comprehensive set of recommendations which are being assessed in the preparation of a White Paper due in early 2009.

While an extensive discussion of research in universities is outside the scope of this review, there are four issues on which the panel considers it must make specific comment as they are critical to its vision for higher education. They are outlined in this chapter and are:

- funding for research infrastructure;
- increasing the stock of high-quality academic staff for the system;
- income support for research higher degree students; and
- reforming the Commonwealth Government governance arrangements in relation to research funding for the higher education system.

3.5.1 Funding for research infrastructure

Universities are funded by the Australian Government to undertake research through a dual system of competitive grants and block grants. The Australian Government provided a total of $946 million to universities in competitive grants in 2006 (The Allen Consulting Group 2008).

Competitive grants are underpinned by Commonwealth block grant programs which provide funding for infrastructure, the indirect costs of research and research education. The main block grant programs are the Research Infrastructure Block Grants (RIBG) Scheme, Institutional Grants Scheme (IGS) and the Research Training Scheme (RTS).

- Research Infrastructure Block Grants Scheme ($208 million in 2008) is allocated to institutions on the basis of a formula which reflects their income from competitive grant programs. Costs supported through Research Infrastructure Block Grants funding include the non-capital aspects of facilities such as libraries, laboratories, computing centres and salaries of support and technical staff (DEEWR 2008a). The National Innovation Review (Cutler 2008) notes that the current level of funding provides a top-up of 20 per cent to competitive grants.
- Institutional Grants Scheme ($308 million in 2008) provides more general support for research and research training. Funding is allocated on the basis of institutional research performance using a formula which includes overall research income, research student load and publication metrics. Institutions have considerable discretion in the way they spend Institutional Grants Scheme funding (DEEWR 2008b).
- Research Training Scheme ($585 million in 2008) provides grants to eligible institutions to support research training for students undertaking doctorates and masters degrees by research (DEEWR 2008c).
The original logic of the dual funding arrangements in universities was that the research-granting agencies would pay the direct costs of the projects they supported, while the universities met from their operating grants the costs of salaries of the chief investigators and the general infrastructure needed to sustain research. Additional funding for project-related infrastructure costs was to be provided through the Research Infrastructure Block Grants (RIBG) Scheme.

However, recent reports have provided evidence that rapid growth in competitive grant funding has not been matched by similar growth in block grant funding.

In 2007 the Productivity Commission reported that ‘the conceptual arguments for dual funding are sound... But changes to the funding for higher education research have increasingly eroded the share of block grants.’ (2007, p. xxix)

The Allen Consulting Group (2008) also provided evidence in a recent study that the funding which universities have received from Research Infrastructure Block Grants Scheme has not kept pace with growth in competitive grants over the period 2000-01 to 2006-07.

A study commissioned for this review from Dr Thomas Barlow (2008) estimated that the share of university revenues used to cross-subsidise externally funded research increased from 8 per cent in 2000 to 12 per cent in 2006. He suggested that the level of ‘co-investment’ required from universities is shifting the cost structures of research in Australian universities away from those in other countries and resulting in unintended and undesirable distortions in university operations.

Barlow argued, too, that there has been a shift in the balance between disciplines because growth in competitive project grants has tended to focus on particular disciplines, such as medicine and ‘hard’ sciences, and block grants are distributed in proportion to competitive funds. This encourages universities to divert funding from lower-cost disciplines to those which are more successful in attracting research grants, regardless of where their best researchers are located.

In submissions to the review and in consultations, a number of universities expressed significant concern about the inadequacy of block grant funding, and stated that they had been forced to cross-subsidise research projects gained from national competitive grants from other funding sources. They suggested it was funds for teaching domestic and international students which were used to bolster the research enterprise. The University of Melbourne (p. 20) suggested in its submission that ‘the more successful a university is in obtaining national competitive research grants, the more it must subsidise such research from other revenue sources. This is a perverse incentive.’

This under-funding of the indirect costs of research, which has led to cross-subsidisation from teaching funds, has affected the quality of teaching and has probably contributed to the increase in student-staff ratios in recent years. In addition, it seems that the general uncertainties about gaining research funds, combined with the under-funding of the direct and indirect costs of research, have had a negative impact on staff in terms of lack of employment security, excessive workloads and high levels of workplace stress (Winefield et al. 2008). This makes an Australian academic and research career less attractive at the point when Australia faces great competitive pressures to retain and renew this workforce.
Optimal quantum of funding for infrastructure support

The panel has focused its attention on the Research Infrastructure Block Grants Scheme which is directly linked to the size of the research income earned by each institution from competitive grants. Both the quantum of funding and the way in which it is allocated should be addressed.

In 2006 universities received 21 cents in Research Infrastructure Block Grants support per competitive grant dollar earned (Barlow 2008). Submissions to this review from universities and groups suggest that more appropriate funding of competitive grants would be achieved if the Research Infrastructure Block Grants contribution were to be raised to between 40 and 55 cents.

In its recent report, The Allen Consulting Group (2008) compared experience across a range of countries and reported that the international benchmark for funding indirect costs of research projects was 50 per cent of the value of the original grant. The Allen Consulting Group estimated that, for the year 2006, this would require an increase in the Research Infrastructure Block Grants Scheme of $286 million (27 per cent). It proposed that Australia consider a composite model based on a minimum fixed percentage of 50 per cent of project funding to cover indirect costs. Universities could receive this fixed percentage funding or opt for full project-based costing. The latter would require institutions to operate accounting systems with the capacity to attribute costs to individual research projects.

The panel prefers the simpler solution, which does not involve universities in additional reporting load. It supports an increase in the total Research Infrastructure Block Grants allocation, so that universities receive 50 cents in the dollar for the amount allocated to them through competitive grants.

Recommendation 8

That the Australian Government increase the total funding allocation for the Research Infrastructure Block Grants program by about $300 million per year. This represents an increase from about 20 cents to 50 cents in the dollar for each dollar provided through competitive grants.

3.5.2 Increasing the stock of high-quality academic staff in higher education

High-quality academics are critical to successful research and innovation, as well as to provision of quality teaching and learning. The base qualification for a stable academic career is now a doctorate and thus increasing the stock of people available to enter this career is tightly tied to the number in training to acquire this qualification. Of course, people with doctoral qualifications are also employed in other sectors, for example, in public and private research organisations.

To address shortages created by the imminent retirement of a large cohort of academics (discussed in Chapter 3.1) and to expand Australia’s academic and research workforce in the longer term, universities must enrol more doctorate or masters by research (known collectively as higher degree by research) students.
The number of domestic students completing higher degrees by research has grown steadily since the mid-1990s, from 3,439 in 1995 to 5,532 in 2007. This growth was driven by doctorate by research completions, which have more than doubled to 4,405 in 2007. Over the same period the number of students who completed masters by research declined from 1,476 in 1995 to 1,101 in 2007 (DEEWR). This decline is, no doubt, a function of the primacy of a doctoral qualification for academic and research careers.

However, growth in the number of people completing doctorates by research has slowed over the last five years. This has raised concern about the availability of people with these qualifications for the academic and research workforce.

The numbers enrolled in doctorates by research are strongly influenced by the allocation received by universities under the Research Training Scheme (RTS). There has been no increase in the scheme’s base funding over the period 2001 to 2008 (DIISR 2008). In a submission to a recent House of Representatives Standing Committee inquiry into research training, the Group of Eight commented that:

> Current Australian Government funding rates for HDR [higher degree by research] student training bear no relation to actual costs of providing supervision, training, infrastructure, consumables and support services to students across different disciplines. (Group of Eight 2008b, p. 2)

The Allen Consulting Group (2008) has suggested that the cost of research training significantly exceeds revenues which universities receive for that training, and estimated the 2007 shortfall in Research Training Scheme funding for the sector as $271 million in 2006-07.

In work commissioned for this review, Barlow (2008) suggested that, while the Research Training Scheme is notionally focused on research training, in practice its funding tends to be absorbed into general revenues. He proposed a revised model to quarantine training-related costs.

While the structure of the Research Training Scheme is outside the panel’s terms of reference, it considers that the minimal increase in the funding quantum in recent years does not align well with the need to attract more research higher degree students.

In 2007 it was estimated that about 1,725 additional academics would be required each year between 2006 and 2016 to replace staff leaving the academic workforce or retiring. About 4,000 domestic PhDs will be produced each year over that period, but only about 900 will seek to enter the academic labour market. The biggest shortfalls will occur in fields with low rates of PhD students to academic staff and high rates of dispersal within the labour market, such as geology, mathematics and engineering (Group of Eight 2007).

On the basis of the information available, the panel was not able to make a definitive recommendation on the number of additional Research Training Scheme places required to meet future demand for people with higher degrees by research. It concluded that further work needed to be undertaken in this area.
Recommendation 9
That the Australian Government commission research into future demand for, and supply of, people with higher degree by research qualifications and that it increase the number of Research Training Scheme places on the basis of the findings of the research.

The demography of the academic workforce in Australia, coupled with the time lags involved in research higher degrees, will make it difficult to locate sufficient well-qualified academic staff for teaching and research in universities of the future. International higher degree by research students who complete qualifications in Australia are also a significant source of prospective academics for Australia. This is discussed further in Chapter 3.6.

3.5.3 Income support for higher degree by research students

The National Innovation Review report (Cutler 2008) suggested that one factor behind the difficulty in attracting the best students to undertake research training was the level of income support available. Most domestic research higher degree students are supported by Australian Postgraduate Awards (APAs) or by scholarships provided by their institutions which usually have similar benefits to the Commonwealth-funded APAs. The APAs currently provide an annual stipend of $20,007 (tax-free) for two years for a masters by research student or three years, with a possible extension of six months, for a PhD student.

The National Innovation Review considered that the $20,007 stipend could not compete with lucrative job opportunities that would usually be available for high-quality honours graduates and was not an incentive for a student to commit to the costs involved in devoting four or more years to a PhD (Cutler 2008). The $20,007 stipend is barely above the poverty line and has not kept pace with either the Consumer Price Index or full-time adult weekly earnings.

Work undertaken for this review shows that the real value of the APA stipend for full-time students has dropped from $274 per week in 1992 to $253 per week in 2008, and the proportion that it represents of the average weekly earnings in Australia has dropped from 46 per cent to 34 per cent over the same period (Chapman and Lounkaew 2008). It will, therefore, be difficult to increase the attractiveness of research degree study to local high-achieving students unless the APA stipend is significantly increased.

The panel considers that the APA stipend should be raised to about $25,000 per annum and notes that this is in line with the recommendation of the National Innovation Review. The panel also supports, in principle, the recommendation of the National Innovation Review that the period of candidature for the doctorate by research supported by an APA should be increased from three to four years.

Recommendation 10
That the Australian Government increase the value of Australian Postgraduate Awards to $25,000 per year and increase the length of support to four years, as recommended by the National Innovation Review, to provide greater incentives for high-achieving graduates to consider a research career.
3.5.4 Reform of Commonwealth Government governance arrangements in relation to research funding within the higher education system

The role of Australia’s higher education sector in the nation’s innovation system cannot be considered in isolation from the sector’s other roles, particularly its role in teaching and learning. This is particularly the case for Australian universities. During the conduct of this review, one central and ongoing debate has been the relevance and importance of the teaching and research nexus. The large majority of participants in this review have argued that a core role of a university is to conduct basic and applied research. In addition, they have argued that it is the link between this basic and applied research and the teaching and learning within an institution of learning that has created what we describe today as a university. The panel agrees with this view.

However, this has important implications for the way that universities are accredited and governed and what governments might consider appropriate funding arrangements for research and research training in universities. This matter is considered more fully in Chapter 4.1.

In that chapter, it will be seen that the panel is recommending that a significantly strengthened accreditation and regulatory framework should be implemented for the higher education sector. In particular, the panel is recommending that universities should be accredited to provide research higher degrees only if they have qualified academic staff who are research active in the narrow discipline area in which such degrees are to be offered.

This matter is particularly relevant to the discussion in this chapter about the funding of research and research training in Australia’s universities. In practice this would mean that the Australian Government would need to be sure that universities met these enhanced regulatory requirements before funding could be allocated.

This also has implications in relation to how funding arrangements are organised within government. The accreditation and regulatory arrangements recommended by the panel imply that the most efficient administrative arrangements for government would be for the same government agency to be responsible for accreditation and regulation, and for all funding matters related to teaching and learning and research within the higher education sector.

If the current arrangements are to continue, then it implies that in relation to the higher education sector, policy and decisions about funding of research and research training in universities should be decided jointly by the Minister for Innovation, Industry, Science and Research and the Minister for Education, Employment and Workplace Relations.
3.6 International education and global engagement

Australia has been a world leader in international education. It has also been extremely successful in developing education as an important export industry and Australia's universities have been central to the development of this industry. But the Australian higher education sector will need to build on this success and broaden the focus of its international education activities if it is to remain globally competitive. A critical issue is whether our approach to promoting and regulating international education needs to change in recognition of the current stage of development of the industry in Australia and the strategies adopted by Australia’s international competitors. Strengthening the sector’s general regulatory, accreditation and quality assurance systems as set out in Chapter 4.1 will strengthen Australia’s international education effort.

The higher education sector needs to capitalise on its considerable strengths in international education and focus on developing a long-term sustainable strategy for global engagement. There is a need to move to what is being called a ‘third phase’ of internationalisation characterised by a more holistic approach which would include:

- maintaining a sustainable ‘trade’ agenda with a more diverse international student body and a greater proportion of higher degree research students;
- better supporting students (both domestic and international) to improve their experience on campus and ensure their work readiness in the global environment;
- improving coordination across government to ensure an alignment of policies to support industry development, regulation and skilled migration; and
- focusing more on international research collaborations.

3.6.1 Strategic context

In 2007-08 Australia’s education services exports were valued at $14.2 billion (ABS 2008). Of this, $13.7 billion was generated by onshore students and the rest by offshore students’ fees and education consultancy services (Australian Education International 2008a). Since 1982, these exports have grown at an average annual rate of around 14 per cent in volume terms. Their share in the value of total exports increased from less than 1 per cent to almost 6 per cent in 2007 (Reserve Bank of Australia 2008). Education services have displaced leisure travel services as Australia’s largest service export and are now the third-largest export overall, behind only coal and iron ore (see Figure 23). Education exports also make a significant contribution to employment (Kenyon and Koshy 2003).

Education exports are particularly significant to some states. For example, in Victoria they constituted the state’s biggest export in 2007-08 and are worth $4.45 billion (Australian Education International 2008a).

More than half of the $14.2 billion earnings come from the top five source countries of China, India, South Korea, Malaysia and Hong Kong, with $3 billion from education exports to China alone (Department of Foreign Affairs and Trade 2008).

Higher education has grown rapidly and makes the largest contribution to exports of education services representing around 60 per cent of the value of education services exports in 2007 (Reserve Bank of Australia 2008).
Global engagement is critical to our success in the knowledge economy

Australia’s economy is inexorably linked with world developments and events, with increasing flows of people, information, trade and finances crossing national boarders. Australia’s future will be determined by how well it performs in an economy driven by knowledge-based activities as well as its traditional industries such as resources, manufacturing or primary production. As stated in a World Bank report:

For countries in the vanguard of the world economy, the balance between knowledge and resources has shifted so far towards the former that knowledge has become perhaps the most important factor determining the standard of living – more than land, than tools, than labour. Today’s most technologically advanced economies are truly knowledge-based (World Bank 1999, p. 16).

As part of this, there is a global competition for talent and knowledge and the higher education system’s performance in producing high-quality graduates and research will be crucial to Australia’s long-term productivity and growth outcomes.

The global reputation and standing of a country’s higher education system will determine its competitiveness in attracting research collaborations, international academics and students, which in turn will drive its success in the knowledge economy. The way in which the higher education system approaches its international engagement will have a significant impact on its ability to produce relevant teaching and research to meet future challenges. International education and global engagement are critical elements of higher education.
Global engagement has different dimensions

The global engagement of the higher education system has a number of different elements and purposes which are all vitally important. In broad terms these include:

- the important contribution of the international education export industry to Australia’s economy;
- the contribution that international education plays in meeting Australia’s medium-to long-term skills needs;
- the contribution international education makes to preparing Australian students for the global workforce;
- the exchange of knowledge and ideas across national boundaries which includes the well-understood and well-developed notions of collaboration between institutions, researchers and scholars; and
- the role that higher education plays in helping to meet Australia’s foreign policy goals, and the educational requirements of neighbouring countries.

While these are commonly aggregated in any discussion of global engagement it is important to consider them as separate but related elements as they have very different goals and drivers. While Australia has been an undoubted success story in certain aspects of international education and global engagement, its success on each of the different elements outlined above varies as discussed below.

3.6.2 International education as an export industry

Development of the industry

International education in Australia has gone through two distinct phases. The first phase was characterised by educational aid and the second by educational trade. These are set out in the box below.

Australia has the highest proportion of international students in higher education tertiary type A programs in the OECD (see Figure 24) and accounts for one-tenth of the world market for international higher education. OECD data show that the world number of international higher education students has multiplied by three between 1985 and 2006. In Australia it has multiplied by 12.

The current phase of internationalisation has seen international students in Australian higher education grow from 21,000 in 1989 to over 250,000 in 2007: ‘Australia ranked as the fifth largest recipient of overseas higher education students among OECD countries in 2005 and the third largest English-speaking destination for overseas students behind the United States and the United Kingdom’ (Reserve Bank of Australia 2008, p. 15) (see Table 10).
The first two phases of international education

Phase One: 1950s – 1980

Under the Colombo Plan it is estimated that as many as 40,000 students came to study in Australia on scholarships and fellowships, mainly from Asia. The plan supported developing nations by building human capacity through a multilateral scholarship exchange program. This was seen as a key component of Australia’s foreign aid policy and the foundation for its strong position in the Asia-Pacific region today. Many Colombo alumni now occupy positions of influence in their home countries while maintaining strong ties to Australia.

However, by the 1970s there was growing dissatisfaction with the effectiveness of the Colombo Plan in meeting Australia’s foreign policy and foreign aid objectives. In addition there were concerns about increasing numbers of overseas students. This led to two inquiries into the overseas student programs in 1982: the Committee of Review of Private Overseas Student Policy (the Goldring Committee) and the Committee to Review the Australian Overseas Aid Program (the Jackson Committee).

Phase Two: 1980 – present

The Goldring and Jackson committees reported in 1984. Jackson recommended the end of the aid approach to international education and the introduction of unrestricted numbers of full-fee-paying international students. A full-fee program for overseas students began in 1985. This was in addition to a program under which the costs of a limited number of overseas students were subsidised by the Commonwealth and the students paid about one-third of the cost of their tuition. Institutions were encouraged to open their doors to overseas students who would pay the costs of their education.

In 1990, intakes of subsidised students ceased and from that time all new overseas students have been required to pay the full cost of their education except in certain circumstances, for example, where fees are covered by a government or university scholarship. Institutions could only accept overseas students if they charged fees at full cost. The number of foreign ‘aid’ students subsidised by the Australian Government fell from 20,000 in 1986 to 6,000 in 1991 while the number of full-fee students rose from 2,000 to 48,000 over the same period.

Sources: Smart, Volet and Ang 2000, Cuthbert, Smith and Boey 20008, Smart and Ang, 1996

Table 10: Overseas student numbers, higher education

<table>
<thead>
<tr>
<th>Country</th>
<th>Number ('000s) 2006</th>
<th>Average annual growth (per cent) 2000-2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>585</td>
<td>3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>330</td>
<td>7</td>
</tr>
<tr>
<td>Germany a</td>
<td>261</td>
<td>6</td>
</tr>
<tr>
<td>France</td>
<td>278</td>
<td>12</td>
</tr>
<tr>
<td>Australia</td>
<td>185</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Education At Glance: OECD Indicators 2008  a Excludes advanced research programs
**Sustainability of the international education market**

While Australia has been very successful in attracting international students there is some concern about the viability and sustainability of this growth.

One aspect of this concern relates to possible over-dependence of some providers on overseas students, which leaves them vulnerable to political and economic upheavals in the markets on which they depend. Figure 25 shows that the average proportion of total revenue derived from overseas student fees is 15 per cent. However, two providers earned more than 30 per cent of their revenue from international student fees, with the highest at 44 percent.

Some institutions could also be vulnerable in the event of a sudden change in demand. A forecast of global demand for international higher education prepared for IDP Education in 2007 projected demand for places in Australia would ‘grow by 4.25 per cent per year to 2010, then slow to 3 per cent per year to 2015 and then slow further’ (Banks, Olsen & Pearce 2007, p. 2). It is unclear how this will be affected by recent global economic developments. While International Monetary Fund projections of economic growth are deteriorating, Australia’s major source countries for international students continue to grow and major competitor countries may experience even more marked economic downturns than Australia. The rapid depreciation of the Australian dollar relative to currencies of its major competitors and source countries also may help to bolster Australia’s market position (McKenzie 2008). However, the volatility of economic forecasts and currency movements requires a degree of caution in the short to medium term.
Another aspect of sustainability relates to what on the face of it might seem to be the narrowness of the international student cohort in terms of country of origin, field of study and level of study. In particular, the data show that in 2007:

- over 80 per cent of international students in Australian higher education are from Asia, including 21 per cent from mainland China;
- over half of total international students are studying in the management and commerce disciplines, with 67 per cent of the Chinese student cohort of 58,588 students undertaking degrees in these subject areas; and
• 59 per cent of the international student population is studying at the undergraduate level and a further 28 per cent is studying masters by coursework. Only 3.6 per cent is undertaking a research higher degree (DEEWR 2008).

While this sort of concentration of overseas students and the preferred course of study may indicate a comparative advantage of the Australian higher education sector, it may also lessen the value of the educational experience for both international and domestic students. A 2006 survey found that overseas students' rates of overall satisfaction with the study experience in Australia and with their course were somewhat lower than for a comparison group of Australian students. The report concluded that there is ‘room for improvement’ (p. 55) in terms of the international student experience. Particular areas highlighted in the survey included the quality of education and course content; involvement with, and commitment to, international students by staff; the cost of courses; and opportunities for more interaction with Australians (Australian Education International 2007).

It appears that many institutions use international student revenue to support services to domestic students and bolster research infrastructure. While the panel supports the right of institutions to manage their own affairs, it is concerned that there appears to be a systematic pattern across institutions of cross-subsidisation to supplement other institutional activities. This suggests that funds available for teaching of domestic students and for research activities may be insufficient and that services for international students would improve if more funds were made available to institutions.

Nevertheless, it is clear that, while some higher education institutions are dependent on income from full-fee-paying international students for their viability, this is not the case for others that also have a significant international student enrolment. A number of these institutions would continue the current scale and intensity of international student activity because it is central to their mission as global players in education and because of the financial flexibility that their international student activities now provide.

If structured appropriately, international student activity can operate hand-in-hand with the public funding of the Australian higher education sector. In fact, the question of appropriate public funding for higher education institutions should be considered as independent from the issues related to the support of the international education industry.

If higher education institutions receive appropriate public funding this would enable them to focus on developing a sustainable base for their international activities. It would ensure that more of the income generated from international students could be used to improve services for those students, in addition to using the funds generated from this activity for other quite appropriate purposes, such as increasing the institution’s research effort.

Broader issues about higher education funding are included in Chapter 4.2.

**Marketing and regulating international education**

The rapid expansion of the international higher education industry reflects a number of factors. Australia is seen as an attractive destination for many students seeking a safe, English-speaking environment. It is convenient and close to home for many students from the Asia-Pacific region. Visa procedures in Australia are easier than in many other English-speaking countries (depending on the applicant’s nation of origin), although visa costs are significantly higher (Universities Australia 2008b).
However, competition in the industry is intense, not only between institutions within Australia, but also between countries. Indications that the growth of the market is slowing suggest that domestic and global competition will intensify. As well, Asian countries from which Australia has traditionally recruited students are developing their local higher education capacity to meet domestic demand and are becoming players in the international student market. Demand is also price sensitive to tuition and living costs and international students are potentially very mobile if concerns about suitability, cost or quality gain traction.

### Marketing arrangements in other industries

#### Tourism Australia

Established in 2004, Tourism Australia is an Australian Government statutory authority that promotes Australia as a tourism destination internationally and domestically and delivers research and forecasts for the sector. It has no formal policy advising role and does not have regulatory functions.

Tourism Australia was formed by merging the Australian Tourist Commission, See Australia, the Bureau of Tourism Research and the Tourism Forecasting Council to bring together knowledge about tourism from different perspectives and allow greater flexibility to shift resources in response to changes in the business environment.

Tourism Australia reports to the Cabinet Minister with responsibility for tourism. It is governed by an eight-member board that includes representatives of the tourism industry. Offices are located in Australia and overseas. In 2007-08 it had 219 staff, of which almost half were located offshore. The Australian Government significantly boosted funding for tourism marketing at the time of the creation of Tourism Australia and continues to be the main source of funding for the body.

#### Australian Wine and Brandy Corporation

The Australian Wine and Brandy Corporation is an Australian Government statutory authority established in 1981 to provide strategic support to the Australian wine sector. The corporation’s services are designed to increase and sustain demand for Australian wine through activities in five areas: market development, information and analysis, compliance, trade, geographical indication support and client service.

The corporation is responsible for regulating wine labelling, wine descriptions and exporting through a regulatory framework that includes export licensing and auditing of wine origin and blend. It also participates in international wine organisations and has a role in providing advice to the government on bilateral and multi-lateral trade agreements.

The corporation comprises eight non-executive members appointed by the Minister from persons nominated by a wine-industry selection committee on the basis of expertise in wine making, grape growing, marketing, finance, business management and administration or government policy processes and public administration.

In 2007-08, the corporation employed 55 staff, with 12 staff located offshore. The corporation funds its activities from levies, stakeholder contributions and revenues from provision of goods and services.

The higher education sector is similar in many respects to other export industries. The box above sets out arrangements for export promotion in tourism and wine, two other highly competitive industries in which Australia has been successful.

The recent Review of Export Policies and Programs has recommended the development of a new and national export and investment strategy to respond to the ‘challenge of proximity’ as the weight of the global economy shifts into Australia’s time zone over the coming decade. The review also recognised the value of specialised bodies within an overall enhanced approach to coordination of export programs (Mortimer 2008).

While the need for strong leadership and coordination by government in supporting international education and training is recognised by stakeholders, there remain concerns about Australian Education International’s dual roles in both promoting and regulating the industry. Universities Australia, in its submission to the Review of Export Policies and Programs (Universities Australia 2008b), suggested that there is a case for separating Australian Education International from the Department of Education, Employment and Workplace Relations and making promotional activities more directly accountable to higher education providers who contribute towards their costs. The Innovative Research Universities Australia group also supported this separation.

Universities Australia also suggested that the role of Australian Education International should be expanded to become a ‘whole-of-government’ advocate within Australia for international education exports. In its submission the Innovative Research Universities Australia group supported this view and suggested the body could be similar in structure to Tourism Australia and modelled on the British Council. Examples of how these functions are handled in the United Kingdom and New Zealand are set out in the box below.

These examples of approaches in other countries show the value of going beyond an export promotion focus to an approach which focuses on the development of education and training export opportunities as part of a holistic and long-term sustainable strategy for global engagement in education. This would include:

- seeking to diversify the international student body to improve the sustainability of the industry;
- attracting a higher proportion of research higher degree students to help build Australia’s future research and academic workforce;
- focusing more on the quality of the experience for international students on- and off-campus and on preparing them for subsequent employment in Australia if that is what they seek;
- adopting a more coordinated approach across governments to better align policies supporting industry development, regulation and quality assurance and facilitating skilled migration; and
- increasing the focus on building international research collaborations and research networks (and the recruitment of high quality research students as part of this).
Industry development models for higher education

**United Kingdom**

- Education UK Partnership is a partnership of the British Council together with international education providers to promote United Kingdom education and training overseas. It is responsible for:
  - implementing the Prime Minister’s Initiative for International Education, which is a strategy to secure the United Kingdom’s position as a leader in international education and sustain the managed growth of international education delivered both in the United Kingdom and overseas. Targets have been set, including attracting an additional 70,000 international students and achieving demonstrable improvements to student satisfaction ratings;
  - delivering export promotion services to United Kingdom education providers building on the British Council’s international network and broader public diplomacy role to give access to market research, promotional exhibitions, training events, in-country assistance and an ‘Education UK’ brand.
- The strategy recognises that international student recruitment to the United Kingdom depends on reputation and standing in the international arena, ensuring the quality of the student experience, forming strategic partnerships and alliances and market diversification and consolidation.
- The partnership is funded by contributions from its members. The British Council contributes through its grant from the Foreign and Commonwealth Office and United Kingdom education providers contribute through a combination of subscriptions and payment for products and services.

**New Zealand**

- Education New Zealand, a not-for-profit charitable trust that is governed by the New Zealand export education industry, is the umbrella industry body for education exporters.
- It has a partnership arrangement with the Ministry of Education to support export development activities, as well as a formal agreement with the New Zealand Trade and Enterprise for the promotion of New Zealand as a destination for international students. Other strategic relationships include the Ministry of Foreign Affairs and Trade, Tourism New Zealand and Immigration New Zealand.
- The Ministry of Education has responsibility for policy setting and looks to develop international relationships that support the expansion of international education opportunities that contribute to New Zealand’s broader knowledge economy, trade, foreign policy and development assistance goals. The Ministry runs a number of scholarships and innovation funding and research schemes and supports an education counsellor network.
- In 2007 the New Zealand Government released its *International Education Agenda: A strategy for 2007-2012*. The document sets the direction for the government’s engagement in international education and identifies priority areas for government action. The strategy goes beyond the traditional focus on hosting international students, providing a framework for the wide variety of international education providers and other organisations involved in intercultural learning and exchange.

The panel has concluded that the future of the industry would be best served by a marketing and development model that establishes a separate organisation to promote the sector’s international student activity. The body would have considerable independence and a whole-of-government approach. The key features of a new approach would be:

- establishment of a separate body within government with a mandate to coordinate whole-of-government activity in promotion of Australian education and training overseas;
- funding of that body on a joint basis by Commonwealth, state and territory governments and education providers. Governance arrangements would reflect this partnership approach and feature significant representation from education; and
- the adoption of a holistic approach to promotion that improves the sustainability of the industry over time and strengthens Australia’s capacity to prosper in the global competition for talent and knowledge.

As well, immigration policies need to be better aligned with those relating to education and skills development. In recent times, there has been greater collaboration between government departments dealing with education and immigration, but more needs to be done to ensure policy coherence. For example, changing visa classifications can have a significant impact on those students who are able to study here and can also affect the capacity of institutions to attract academic staff from abroad.

The panel has also concluded that the regulatory framework for tertiary education is in need of a major overhaul and that the regulation of international education should be considered in a broader context which involves the creation of a national regulatory body. This body should also take on responsibility for administration of the Education Services for Overseas Students (ESOS) Act 2000. Governmental representation and functions such as qualifications recognition and handling of trade issues would appropriately remain functions of a government department. Issues about regulation are considered in more detail in Chapters 4.1 and 4.3.

**Recommendation 11**
That the regulatory and other functions of Australian Education International be separated, with the regulatory functions becoming the responsibility of an independent national regulatory body.

**Recommendation 12**
That the industry development responsibilities of Australian Education International be revised and be undertaken by an independent agency which is accountable to Commonwealth and state and territory governments and education providers.

**Protections for international students**

There have been concerns raised in consultations and submissions about support for international students beyond academic matters and about the adequacy of the legislative framework to protect international students. The Educational Services for Overseas Students Act 2000 (the ESOS Act) assures quality, provides consumer protection in the market and supports Australia’s migration policy. It also establishes a partial duty of care on institutions through the obligation to offer services when the student is on campus.
There was mixed feedback from the sector on the ESOS arrangements. Some institutions argued that the current ESOS legislation provides a sound framework to ensure high ethical standards in the recruitment and education of international students, but called for the Government to develop accountability and reporting mechanisms without seeking to control or over-regulate. Universities Australia, in its submission to the Review of Export Policies and Programs (Universities Australia 2008b) noted that the ESOS regulatory framework is highly regarded internationally but suggests that some of the elements of the framework are unnecessarily onerous for universities.

In its submission to the review the Australian Technology Network suggested that the ESOS legislation and the accountability requirements which flow from it should be reviewed to remove unnecessary impediments to Australia’s recruitment and support for international students. In particular, the Australian Technology Network suggested that Australian government current arrangements regarding the use of education recruitment agents, visa requirements, and institutional and student reporting requirements need to be examined in light of this.

An evaluation of the effectiveness and efficiency of the ESOS arrangements (PhillipsKPA & LifeLong Learning Associates 2005) found that there was support for ESOS across all sectors of international education and that the overall architecture was generally effective. The report made a number of recommendations to improve arrangements in areas such as nationally consistent provider registrations and to strengthen the standards which underpin the framework. The ESOS Act was amended in 2007 to implement these recommendations and the accompanying National Code of Practice for Registration Authorities and Providers of Education and Training to Overseas Students was substantially revised to increase clarity and to give institutions more flexibility.

The panel has concluded that on balance a further review of the ESOS framework is not warranted at this time and suggests that the Commonwealth Government commission an independent review of the implementation of these changes by 2012. This should take account of developments in frameworks in other countries. For example, the OECD noted in its final report on the Thematic Review of Tertiary Education that international students have unique needs that require support beyond immigration formalities and suggested that there be better support and pastoral care for international students. The organisation has praised New Zealand in particular for its code of practice (see panel below).

### New Zealand Code of Practice for the Pastoral Care of International Students

This code covers a broad range of areas where international students need support: educational and linguistic preparation; assistance to adapt to a new cultural environment; advice in relation to accommodation, travel, health and welfare; information and advice on addressing harassment and discrimination; monitoring of student attendance and course progress; and mandatory communication with the families of students at risk. The enforcement of the code is assured through an independent public agency – the International Education Appeals Authority – which receives and arbitrates complaints from students.

Sources: OECD 2008a, vol. 2 pp. 274-275
3.6.3 Can international students help Australia meet its skills needs?

If Australia is to obtain the workforce it requires for 2020, it must widen the international student base. The profile of Australia’s international students is skewed in disciplines, levels of study and nations of origin. It is critical that the student base is broadened, and in particular that more international students are attracted to higher degree research programs.

International education is a recognised source of skilled labour. The OECD notes that immigration policies that target international students and scholars can yield positive results and can be critical in building the necessary skilled workforce for the future. In many OECD countries, ‘... the recruitment of international students is part of a broader strategy to recruit highly skilled immigrants on the hope that some of them remain in their host country after their studies and at least stimulate academic life and research while they study’ (OECDa 2008, vol. 2, p. 264).

Australia has facilitated this approach to internationalisation through its immigration policies. Over the years a number of policy changes have been made to encourage international students to continue to contribute to Australian economic and social development. The most recent policy adjustment made last year allows graduates of Australian tertiary education institutions to access a temporary visa for up to 18 months with full working rights. Based on Department of Immigration and Citizenship data, currently about 40 per cent of those who obtain skilled migration to Australia have an Australian qualification of at least two years’ duration. However, Australia lags behind the United States (50 per cent) in the number of international students it retains in the workforce after graduation (Marginson 2008).

International students make a significant contribution to the nation’s skill base and Australia needs to ensure that it has the regulatory frameworks in place to facilitate the retention of graduates. A broader range of high-quality students and more students in higher level research degrees could make a significant contribution to Australia’s skills needs.

**Higher degree by research students**

As discussed in Chapter 3.1, a critical issue for the higher education sector is the renewal of the academic workforce. International students are a potential source of the high-level skills required for academic roles. Australia is not currently well placed to attract international students for the renewal of the academic workforce. In 2007 there were 8,513 international research doctoral students in Australia, constituting just 3.1 per cent of international higher education students, considerably less than the proportion of PhDs in the general student body (4 per cent) (DEEWR).

By comparison, international research students play a more significant role in other nations. In the United Kingdom in 2004, there were 34,533 international doctoral students, compared with 6,594 that year in Australia, although the size of the United Kingdom higher education system is only about three times that of Australia (OECD 2007). In the United States, there are over 100,000 international doctoral students per year with these students constituting almost one third of all international students enrolled in doctoral institutions (Institute of International Education 2007, cited in Marginson 2008).
This situation is particularly striking in light of the fact that, while Australia has the highest proportion of international students among OECD nations, only 19.1 per cent of advanced research students are international students – well behind other OECD nations including Switzerland (44.4 per cent), the United Kingdom (40.8 per cent) and the United States (23.7 per cent) (see Figure 26).

**Figure 26:** International students as a percentage of advanced research program enrolments (selected OECD countries), 2006

![](image)

*Source: Education at a Glance: OECD Indicators 2008, Table C3.1, p. 366*

If Australia is to attract greater numbers of international students into research programs, and find ways in which to retain graduates to stay and work in Australia, research programs need to become more attractive to these high-performing students. High-quality research students will go where the money is in terms of support – scholarships and living allowances – and where there are high-quality research facilities and researchers.

In the United States over 60,000 international doctoral scholarships are provided a year and about half of the international doctoral graduates can be expected to stay on (Marginson 2008).

One significant area of concern that affects the inward movement of higher degree research students is the level of support provided by Australian governments. Compared to the United States and the United Kingdom, there are relatively few scholarships which attract these students and conditions to their visas hinder their spouses and dependants from working and studying in Australia.

Australia does not provide many scholarships with living allowances or support for dependants. This makes it uncompetitive in the global market for higher degree research students. The panel believes that this will have a long-term effect on the national innovation
system. The Review of the National Innovation System has recommended that ‘Innovation policy should be aligned with immigration policies to ensure that they facilitate Australia’s access to the global talent pool. In particular, human capital should carry equal or more weight than economic capital in individual migration assessments’ (Cutler 2008, p. 60).

There have been no specific policies implemented to attract and retain higher degree research students in Australia. Despite the focus on the knowledge economy and forecast shortages of highly skilled workers in Australia, research higher degree students have been given a relatively low priority and little support is provided to them.

The cost of research training at Australian universities is relatively high and is a considerable barrier to participation as, in general, international students in Australia enrol on a full-fee basis. Some countries have elected to grant domestic status to some categories of international students. For example, New Zealand grants domestic status to research and doctoral students as a way of attracting such students (and at the same time the New Zealand Government has introduced policies to exempt children of doctoral students from school fees and to give their spouses work visas). The New Zealand initiative has been very successful with its proportion of international advanced research enrolments to all tertiary enrolment increasing from 16.6 per cent in 2005 to 22.2 in 2006 (OECD 2007; OECD 2008b). The Australian Government’s increased investment in the Australian Scholarships program (see box below) in 2006 recognises, like the Colombo Plan before it, the need to support students from poorer countries.

Australia will need to introduce significant programs of support if it is to compete with other countries for international research students. Scholarships must include both tuition and living expenses and better support for spouses and families must be addressed.

<table>
<thead>
<tr>
<th>Recommendation 13</th>
</tr>
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<tbody>
<tr>
<td>That the Australian Government provide up to 1,000 tuition subsidy scholarships per year for international students in higher degree by research programs targeted to areas of skills shortage. The scholarships would give the recipients the benefit of being enrolled on the same basis as domestic students.</td>
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<th>Recommendation 14</th>
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<tr>
<td>That higher education providers use a proportion of their international student income to match the Australian Government tuition scholarships by providing financial assistance for living expenses for international students in higher degrees by research.</td>
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<th>Recommendation 15</th>
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<tbody>
<tr>
<td>That the Australian Government liaise with states and territories to ensure consistent policies for school fee waivers for the dependants of international research students in government-subsidised places and examine its visa arrangements to improve the conditions for spouse work visas.</td>
</tr>
</tbody>
</table>
Australian Scholarships

Australian Scholarships aim to promote sustainable development and excellence in education. Australian Scholarships offer educational and professional development awards to citizens of the Asia-Pacific region and beyond. These opportunities support growth in our region and build enduring links at the individual, institutional and country levels.

Awards are available to high achievers from participating countries under three programs:

- **Australian Development Scholarships** are a bilateral program offering full-cost scholarships mostly at the postgraduate level. Fields of study are targeted to address agreed priority human resource and development needs of recipient countries, in line with Australia’s bilateral aid program. Up to 1,000 Australian Development Scholarships are awarded each year across 31 countries with scholarships awarded equally between men and women.

- **Australian Leadership Awards (ALA)** comprise Scholarships and Fellowships. ALA Scholarships are academically elite awards offered to high achievers from the Asia-Pacific region each year to undertake postgraduate study (Masters or Doctorate) and a Leadership Development Program in Australia. About 150 scholarships are awarded each year. ALA Fellowships are highly flexible and offer Australian organisations opportunities to provide short-term study, research and professional development activities in Australia for fellows from the Asia-Pacific region.

- **Endeavour Awards** are internationally competitive, merit-based scholarships providing opportunities for citizens of the Asia-Pacific, Middle East, Europe and the Americas to undertake study, research and professional development in Australia. Awards are also available for Australians to do the same abroad. Over 600 scholarships are awarded each year.

Sources: Australian Scholarships, www.australian scholarships.gov.au

**Strengthening English-language skills**

Employers regard good written and oral communication and interpersonal skills as essential in graduates (Graduate Careers Australia 2007b). This expectation applies to all graduates, but is especially relevant to international students where English is not their first language.

In its report on the Thematic Review of Tertiary Education for the Knowledge Society, the OECD noted that international students display higher completion rates than domestic students and ‘… there is no difference [in quality] overall between domestic and international students, and where the latter even outperform domestic students in science, information technology, engineering, education, arts and agriculture/environment’ (OECD 2008a, vol. 2, p. 285).

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12 Those who receive an Australian Development Scholarship or an Australian Leadership Award Scholarship administered by AusAID cannot return to Australia to live for two years after they complete their studies. However, some will move to a third country to undertake further study or work.
Research shows that international students at Australian universities have comparable success rates to domestic students. International students successfully completed 88.8 per cent of units attempted compared with 89.4 per cent for domestic students (Olsen, Burgess & Sharma 2006).

However, the OECD has praised the New Zealand approach to addressing concerns about quality by strengthening ‘language admission requirements and foundation program to ensure that students are adequately prepared to begin their studies, both academically and linguistically’ (OECD 2008a, vol. 2, p. 285). Professional development programs for their staff focusing on improving delivery in classes with large international enrolments have also become a feature of the New Zealand approach. The Code of Practice for the Pastoral Care of International Students requires institutions to ensure minimum skills, and proposes minimum standards.

There is some evidence that the admission of international students with insufficient English-language skills is occurring because of the number of pathways where students applying onshore can bypass the International English Language Testing System (IELTS). Over 2002 to 2005 more than a quarter of international student enrolments and commencements in Australia were based on pathways other than formal test regimes. These included attending Australian secondary schools or undertaking enabling courses offered in VET and higher education (Birrell 2006). Initiatives addressing these problems are set out in the panel below.

A number of submissions to the review suggested that international students need more support during their courses, including the integration of English-language tuition into the curriculum to ensure they develop and maintain high levels of English-language competence. It was argued that improved English-language support ‘...should not be seen as a remedial program ... but as part of the teaching which the university offers international students to prepare them for work in the global economy’ (IDP Education submission, p. 7). IDP Education has also suggested that work-placement schemes should be developed for international students to give them a better understanding of Australian workplaces. Universities Australia (2008c) has also proposed a government-sponsored national internship program to cater for both domestic and international students. A number of universities already offer such programs.

Changes to migration policies now allow graduates to remain in Australia to undertake intensive English-language tuition prior to their applying for permanent migration. This is a welcome step but more needs to be done during their courses of study to ensure such tuition is unnecessary.

The panel has concluded that governments and higher education providers need to place a much greater emphasis on the preparation of international students for the world of work and particularly for working in Australia. This should include a greater focus on English-language proficiency that goes beyond the language competence required for the course and adequately prepares students for the working environment. Providers should give serious consideration to the development of work-placement programs to assist international students to become work ready in the Australian context. They should also continue to pursue initiatives to improve language testing and teaching, including by implementing the outcomes of work coordinated by the Australian Universities Quality Agency.
Improving English-language skills

A number of universities are taking initiatives in this area:

- Griffith University – from 2010 will screen all international students for English-language competency and require those who do not meet a required level to complete a for-credit English subject in their first semester;
- Curtin University of Technology – from 2009 all incoming students will be required to complete a uniEnglish diagnostic test and a communications subject;
- Australian Technology Network – investigating the introduction of an online diagnostic test of reading, writing and listening with students who do not meet a required level given intensive coaching; and
- University of Queensland – has offered to pay for students of non-English-speaking backgrounds to take the International English Language Testing System exam to demonstrate language proficiency.

The Australian Universities Quality Agency and the Centre for the Study of Higher Education have been commissioned by the Australian Government to undertake two projects, respectively to:

- identify gaps and good practice and from this develop a set of principles of good practice in English-language proficiency. A draft set of principles has been circulated for comment; and
- examine the impact of English-language proficiency and workplace readiness on the performance and outcomes of international students who enter the Australian workplace after completion of their studies.


3.6.4 Preparing Australian students for the global workforce

There is growing demand from employers for tertiary qualifications with a strong international component – both from the perspective of the curriculum content and through exposure to different cultures to develop intercultural and language skills and competencies (Australian Institute for Mobility Overseas submission). Knowledge of other cultures and their languages is an essential life skill for future graduates if they are to engage effectively in global professional practice.

Australian students have much to gain from the internationalisation of their education through developing personal international networks, gaining access to new knowledge through exposure to the diverse viewpoints of international students and thus developing broader cultural understanding. However, these benefits have been limited by the market-driven approach of some providers and their failure to internationalise the curriculum.

As well, Australian students ‘need more and better opportunities to go abroad on study programs, or to acquire international experience through internships or volunteering opportunities related to their education programs and to their future employability and productivity’ (Forbes 2008). Australia has had a relatively low rate of outward student
movement compared with some other countries. In 2006 there were just over 10,000 Australian students reported to be enrolled in tertiary education in other countries (OECD 2008b, Table C3.7). While it has been suggested that uptake of overseas study options is growing, feedback received on the OS-HELP program is that its current eligibility requirements and the 20 per cent loan fee limit its effectiveness.

Suggestions in submissions to improve the program included: removing the loan fee, converting half of the loan amount to a grant and relaxing the eligibility criteria to include postgraduate students. Some submissions also argued that it should be available to students enrolled in a wider range of providers. There are also concerns that student take-up may be hindered by issues about finding accommodation and loss of part-time or casual work while students are overseas.

The panel has concluded that the loan fee for the OS-HELP program should be removed as one way to make study overseas a more attractive option. A recommendation relating to this is included in Chapter 4.2.

### 3.6.5 Collaborations between institutions, researchers and scholars

If the Australian higher education sector is to continue to play its pivotal role in the national research and innovation system in 2020, it will need to have effective connections to global innovation and research networks. Recommendations in Chapter 3.5 set out strategies to ensure that Australia has high-quality research infrastructure and to increase the number of research higher degree students and the stock of academic staff. In implementing these strategies it is vital that the international dimension is considered so that the effectiveness of additional investment can be maximised.

Many Australian institutions have invested considerable time in creating bilateral agreements and a small number have joined cross-border consortia. This has resulted in some successes, primarily in the area of student exchanges and twinning programs where students undertake their degrees at two institutions. Australia is also active in research collaboration and many Australian universities are well-regarded in this way, reflecting their middle-level, broad-based research capacity. Submissions to the review pointed to the need for government assistance for universities to develop much more effective research collaborations with overseas institutions and firms; the increasing costs of becoming research partners with overseas institutions; and the availability of assistance for this in countries such as Malaysia, China and Singapore.

It is clear, however, that some countries and institutions are more effective at this than others. Marginson argues that the national higher education systems of countries such as the United States, the United Kingdom, Switzerland, Singapore, Hong Kong, Denmark and Finland are ‘notably effective in the global [knowledge] economy’ (Marginson 2008, p. 41). At the institutional level, Marginson identifies several research universities that are highly engaged and effective in global engagement.
These systems and institutions all share certain characteristics which enable them to better compete in research and innovation and attract high-quality students and staff:

- awareness of global context – an informed understanding of the global higher education context and of the main trends shaping it;
- sense of global position – an awareness of the position of the national system and the institution within the global context, its competitive advantages and disadvantages, and possible strategic options;
- global mission – a strong sense of the national and institutional mission and project within that global context grounded in a broad-based consensus over well-defined objectives;
- strategic capacity – an effective set of strategies for pursuing the global mission, and responding flexibly and quickly to opportunities;
- resources and conditions – elements within the control of the nation and institution that are necessary to both underpin proactive cross-border activity and attract the attention and support of other national systems and institutions; and
- connectivity – the all-important capacity to engage and connect across borders in a sustained manner in different parts of the world making the best use of position and resources (Marginson 2008).

Australia must improve its capacity as a nation and that of individual universities to increase the effectiveness of global collaborations. Aspects of this have been discussed elsewhere in this report, including increasing participation in higher education, investing in research, promoting the international mobility of staff and students and attracting a greater proportion of the international pool of highly talented and skilled people. However, investment in these areas itself does not necessarily translate into global effectiveness.

The recent Review of the National Innovation System concluded that there is room for Australia to enhance its capacity to engage internationally both by opening up current granting programs to international partners and participants and by increasing funding to specific programs in order to leverage investment. To build concentrations of excellence, encourage collaboration and achieve better dissemination of knowledge, it recommended additional funding support for university and other research institutions to partner with each other and with other research organisations (nationally and internationally) (Cutler 2008).

The panel supports the recommendation of the Review of the National Innovation System in this regard. Chapter 3.5 also includes a recommendation for more appropriate funding of the indirect costs of Commonwealth sponsored research, which will improve the sustainability of Australia’s university research effort more generally, including its international dimensions.

### 3.6.6 Australia’s foreign policy goals and the region’s educational requirements

As noted above, the internationalisation of higher education brings significant economic and trade benefits. Australia is not a passive participant in these processes and is actively engaged in shaping developments, especially in the immediate region.
The Australian Government has been engaged in this through the development of free trade agreements, which now cover New Zealand, Singapore, Thailand, the United States and Chile, with five others under negotiation including for ASEAN and China. Since education services are specifically excluded from most agreements, their impact so far on globalisation has been modest, but this may change as the scope of countries included increases (McKenzie 2008). Other forms of educational cooperation include support for student and staff exchange, recognition of skills and qualifications and the development of qualifications and quality assurance frameworks. For example, Australia is a very active participant in work commissioned by Asia-Pacific Education Ministers in 2006, which is aiming to improve transparency in higher education structures and systems by supporting the development and implementation of national qualifications frameworks (DEEWR 2008d).

International students generally maintain relationships with the country in which they studied throughout their lives and careers. International alumni of Australian universities form a large and influential group with the biggest concentrations in the Asia-Pacific region, especially Singapore, Malaysia and Hong Kong, but with fast-growing numbers in China, Indonesia, Vietnam and India (Forbes 2008). In some countries, international alumni play an important role in supporting the recruitment of international students and can provide a channel through which informal diplomacy can be effective when formal government relations are strained (Innovative Research Universities Australia submission).

Australian alumni associations engage in a number of activities including publishing newsletters, developing networks, running web sites and participating in education exhibitions, social events and other Australia linked activities. Australian Education International supports these alumni activities in various ways.

Individual universities have also increased their efforts to maintain and build on links with alumni. This task has been transformed by information technology. Guhr (2007) argues that online communities are changing the ways in which universities are interacting with alumni and current and prospective students.

A significant challenge in Australian foreign policy is the growing global importance of China. Australian higher education can make a significant contribution to building relationships with China through the exchange of students, academic staff and researchers. Australia is the third most popular destination for Chinese students among English-speaking countries, attracting about 12-13 per cent of those studying overseas – the United States attracts about 16 per cent and the United Kingdom about 14 per cent (Australian Education International 2008b). It will be essential for Australian institutions to maintain high standards and excellent student support services to maintain Chinese student numbers as China increases its own higher education capacity.

Australia’s effective engagement in international education is critical to our success in the knowledge economy. This will become an increasingly complex and multi-faceted challenge as Australia grapples with the implications of the third phase of internationalisation.
3.7 Contributing to Australia’s regions

3.7.1 Challenges in regional provision

A number of factors contribute to the challenges around provision of higher education in regional and remote areas of Australia.

Projected decline in student demand in some regional areas

In work commissioned for the review, Access Economics developed demographic forecasts for regions (including state capitals). Individual regions varied considerably in terms of expected growth in the 15- to 24-year-old population over the next decade. However, aggregate growth in the 15- to 24-year-old age group outside capital cities is expected to be lower than the total growth for Australia in every state and territory apart from Queensland. In fact, the number of 15- to 24-year-olds outside the state capital was expected to decline in Victoria, South Australia, Western Australia and Tasmania (Access Economics 2008).

Table 11: Demographic projections by labour force dissemination region, 2008 to 2038

<table>
<thead>
<tr>
<th>Region</th>
<th>2008 Population (All)</th>
<th>Average growth to 2018</th>
<th>Average growth to 2038</th>
<th>2008 Population (15-24)</th>
<th>Average growth to 2018</th>
<th>Average growth to 2038</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>6,964,263</td>
<td>1.1%</td>
<td>0.9%</td>
<td>950,736</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Sydney</td>
<td>4,386,738</td>
<td>1.2%</td>
<td>1.1%</td>
<td>618,935</td>
<td>0.4%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Rest of New South Wales</td>
<td>2,577,525</td>
<td>0.9%</td>
<td>0.7%</td>
<td>331,801</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Victoria</td>
<td>5,284,622</td>
<td>1.4%</td>
<td>1.2%</td>
<td>737,955</td>
<td>0.4%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Melbourne</td>
<td>3,870,499</td>
<td>1.6%</td>
<td>1.4%</td>
<td>555,710</td>
<td>0.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Rest of Victoria</td>
<td>1,414,123</td>
<td>0.8%</td>
<td>0.6%</td>
<td>182,245</td>
<td>-0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Queensland</td>
<td>4,273,720</td>
<td>2.1%</td>
<td>1.8%</td>
<td>602,776</td>
<td>1.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Brisbane</td>
<td>1,897,248</td>
<td>2.1%</td>
<td>1.8%</td>
<td>287,088</td>
<td>1.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Rest of Queensland</td>
<td>2,376,472</td>
<td>2.1%</td>
<td>1.7%</td>
<td>315,688</td>
<td>1.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>South Australia</td>
<td>1,600,445</td>
<td>1.0%</td>
<td>0.8%</td>
<td>217,609</td>
<td>0.0%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Adelaide</td>
<td>1,169,922</td>
<td>1.0%</td>
<td>0.9%</td>
<td>167,437</td>
<td>0.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Rest of South Australia</td>
<td>430,523</td>
<td>0.9%</td>
<td>0.7%</td>
<td>50,172</td>
<td>-0.6%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Western Australia</td>
<td>2,152,914</td>
<td>2.0%</td>
<td>1.7%</td>
<td>307,089</td>
<td>0.8%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Perth</td>
<td>1,589,672</td>
<td>2.1%</td>
<td>1.8%</td>
<td>238,363</td>
<td>1.1%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Rest of Western Australia</td>
<td>563,242</td>
<td>1.6%</td>
<td>1.3%</td>
<td>68,726</td>
<td>-0.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Tasmania</td>
<td>497,747</td>
<td>0.7%</td>
<td>0.5%</td>
<td>65,523</td>
<td>-0.5%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Hobart</td>
<td>209,872</td>
<td>0.9%</td>
<td>0.8%</td>
<td>29,812</td>
<td>-0.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Rest of Tasmania</td>
<td>87,875</td>
<td>0.4%</td>
<td>0.2%</td>
<td>35,711</td>
<td>-0.5%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>219,543</td>
<td>1.5%</td>
<td>1.4%</td>
<td>34,388</td>
<td>0.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Darwin</td>
<td>120,638</td>
<td>1.9%</td>
<td>1.6%</td>
<td>17,875</td>
<td>0.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Rest of Northern Territory</td>
<td>98,905</td>
<td>1.1%</td>
<td>1.0%</td>
<td>16,513</td>
<td>0.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>343,806</td>
<td>1.1%</td>
<td>1.0%</td>
<td>54,374</td>
<td>-0.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Australia</td>
<td>21,339,473</td>
<td>1.4%</td>
<td>1.2%</td>
<td>2,970,749</td>
<td>0.5%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Note: State/territory regions may not sum to total due to rounding.

Source: Access Economics 2008
**Regional loading inappropriate**

Under the current funding model for teaching and learning, a regional loading is provided to eligible institutions according to the number of students they enrol at regional campuses. However, it is not sufficiently targeted to those campuses which have major problems achieving and maintaining viable student numbers because of their location. The institutions in more isolated areas argue, too, that this loading bears little relationship to the actual costs of running these campuses. A number of submissions to the review argued that the current funding arrangements are inadequate to cover the additional costs of regional campuses (for example, Southern Cross University, Deakin University, Murdoch University, Curtin University of Technology).

In its review of this measure, the panel could discern little relationship in a number of cases to the existence of a loading and the location of a campus. Even more mysterious was the underlying logic of the weightings. But its greatest concern is that this loading for provision in regional and remote areas 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 the real problems of provision in localities where there are not enough people support a viable campus. It also masks signals that provision in areas currently served may now need serious review.

Current arrangements through the regional loading do not appear likely to address the problems of falling participation rates in regional and remote areas or to encourage changed patterns of provision better aligned to need. Perhaps most importantly there is little incentive for providers to seek out opportunities to provide programs in regional or remote locations. For these reasons the panel has concluded that the regional loading should be abolished and new arrangements implemented. These are outlined later in this chapter.

**Patterns of regional provision haphazard**

The pattern of regional provision is uneven. In some regional towns a number of universities operate while in others there is no provision. This suggests that the pattern of regional provision is based on history and local political considerations rather than a rigorous process of analysis of need and development of a sustainable and cost-effective service in response. It is time to address the question of regional provision in a more systematic and collaborative fashion.

The panel considers the question of an appropriate approach to regional provision in the future one of the most difficult policy issues it has had to consider. It is aware that the numbers of qualified applicants in some areas is likely to drop further over the next decade and is conscious that it is not realistic to expect that Australia can afford breadth of university provision in many regional towns. The need is to focus higher education provision on the particular local needs at the time rather than maintaining existing university campuses or opening additional campuses. Planning for a better pattern of provision of higher education in regional Australia is necessary for the future of the people in these regions.

**Viability of regional higher education**

In 2007, about 12 per cent of all students (domestic and international) enrolled in higher education in the public universities within Australia were located in regional and remote areas (DEEWR 2008).
Many regional institutions and campuses are relatively small and geographically isolated, which leads to diseconomies of scale. A number of submissions outlined the additional costs of providing higher education in regional Australia. For example, James Cook University argued that:

Non-Metropolitan universities face additional costs in delivering programs to their target markets including the geographical dispersion of people within its catchment; higher proportion of Indigenous students and students from low socio-economic backgrounds; smaller participant numbers in programs; and the flexible mode of delivery required to meet the needs of clients (James Cook University Submission, p. 7).

Within the university sector there is informal acknowledgement that regional provision in many localities is close to unsustainable because of the cost. Many regional campuses are already non-viable without major cross-subsidisation from elsewhere in the institution, and the difficulties of maintaining these campuses will only increase, given current demographic projections.

The minimum viable size of the population in a geographical area for higher education provision has been subject to discussion for some time. For example, a Commonwealth Tertiary Education Commission report in 1986 suggested that a stand-alone university with a broad range of faculties would require a minimum population catchment of 500,000 before it could be economic with a student load of 5,000 (Hudson et al. 1986).

In the two decades since then, trends in financing for teaching and research lead the panel to believe that a student load of 5,000 is unlikely to be sufficient to support a comprehensive university in Australia. In 2007, only two public universities in Australia had a student load of less than 5,000: Charles Darwin University (3,451) and University of the Sunshine Coast (4,104). Although reliable data on enrolments by campus is not available, it appears that most regional campuses of other universities fall below this threshold.

### 3.7.2 A more flexible and adaptable system of regional provision

Australia needs a sustainable system of higher education provision in regional and remote areas. Provision needs to be flexible and innovative. It must anticipate and respond rapidly to local needs. Providers in regional and remote areas need to be encouraged and supported to build upon partnerships with local communities, providers in other sectors of education, businesses and industry. Such arrangements will involve institutional cross-collaboration and partnerships, including sharing the use of facilities and resources.

Collaborations of this nature are particularly suited to higher education provision in thin markets such as regional areas, where demand may be finite or declining, and limited to particular qualifications. For example, a regional community may have both a shortage of registered nurses and a viable feeder group of enrolled nurses with the experience and capability to undertake further education. Travel to a metropolitan campus may not be an option for many of these potential students due to family commitments and financial constraints.

A more flexible approach which allows existing providers to make use of a variety of teaching arrangements such as distance education, collaboration and sharing of infrastructure with local vocational education and training providers, video-conferencing and fly-in, fly-out academic staff does not require a campus with all the costs involved in its establishment. Indeed Australia
may need fewer university campuses in regional areas and more higher education service points, established to meet a need for a period of time and closed when the specific need is met.

This type of provision builds on a number of innovative models of institutional delivery. Sharing of campuses and teaching infrastructure has already developed in some regional areas, primarily between universities and TAFEs, for example, in the Western Riverina as shown in the box below.

**Western Riverina Higher Education Project**

The Western Riverina Higher Education Project is a TAFE, university and community collaboration which aims to enhance higher education opportunities in the Griffith region. The coalition includes Charles Sturt University (CSU), TAFE NSW-Riverina Institute, the Riverina Regional Development Board and the Griffith City Council who have formed a collaborative relationship to offer joint courses, shared facilities, shared services and dual sector qualifications.

Under this model, CSU in partnership with Riverina Institute is offering eight courses across the region to more than 230 students in 2008. Fields of study include business management, digital media, IT networks, social work and fine arts.

Some of the complexities faced in the development and implementation of these arrangements have included: competency units and subject descriptions for cross-credits; curriculum lead times; matching changes in both sectors that occur at non-aligned times; mobility of staff across each organisation; delivery (locations, logistics and modes); and administrative and fee-payment arrangements.


The panel proposes that funding assistance be made available to encourage and facilitate the development of these types of arrangements. It is not defensible for funds to be provided to bolster provision which is an artefact of history and influence, rather than a response to current needs. Once agreement has been reached on more collaborative and better planned approaches, the Australian Government should provide funds to underpin effective models of delivery to meet needs in these areas.

**Recommendation 16**

That, after further consideration of current problems with regional provision, the Australian Government provide an additional $80 million per year from 2012 in funding for sustainable higher education provision in regional areas to replace the existing regional loading. This should include funding to develop innovative local solutions through a range of flexible and collaborative delivery arrangements in partnership with other providers such as TAFE.
Introduction of these reforms could mean that some institutions and campuses operating in regional Australia might require some form of structural adjustment to ensure their ongoing viability. This could involve a range of approaches including rationalisation, collaboration or merging for some campuses or institutions. Funding for structural adjustment to assist transition to the new funding and regulatory environment recommended in this review is discussed further in Chapter 4.2.

Innovative proposal on regional provision

Another response has been mooted to the challenges of provision in regional and remote areas. This is the establishment of a new national university, created through a merger of some existing regional universities and, perhaps, consolidation of some regional campuses of metropolitan universities. This new, consolidated university would be charged with a mission to offer accessible, high-quality education in the regions. Internationally-recognised expertise in delivery of education to regional areas and isolated communities could be concentrated in such a university and it could be given a charter to address regional provision nationally. Funding could be negotiated in recognition of the costs involved in delivery of such a mission.

While such a university may not be best positioned to serve the needs of every regional community, it could offer expertise and support to states, territories and local communities to enable the best solution to be found. The panel believes a university such as this, together with better use of existing facilities and expertise in regional areas, would provide a viable solution to the current and emerging problems it sees in regional provision.

Recommendation 17
That the Australian Government commission a study to examine the feasibility of a new national university for regional areas and, if the study indicates that a new national regional university is feasible, the Australian Government provide appropriate funding for its establishment and operation.

3.7.3 Challenges in outer metropolitan provision

Similar challenges of uneven demand exist in the outer metropolitan areas of many capital cities.

A study commissioned for the review (Birrell et al. 2008) predicted that most of the future growth in Australia’s school-leaver population will occur in outer metropolitan areas of Australia’s major cities.

This presents a range of challenges for higher education provision. Demand for local provision of higher education in Australia’s growth corridors has been patchy. Some campuses which are operated by large metropolitan providers in outer metropolitan areas have recently been closed due to non-viability. Students in outer metropolitan areas do have choice of provision in their city and it is clear that some are willing to travel, often for long distances, to gain access to the course they want to study.

People do not automatically choose to study at the neighbourhood university and it is important to be cautious, in planning for provision in outer metropolitan areas, about projecting demand without taking account of this reality. Of course, demand for higher education from students living in outer metropolitan areas is also profoundly affected by the socio-economic status of the population in the area and by their success at secondary-school level.
The majority of outer metropolitan areas fall into the low to middle socio-economic status categories. Birrell et al. reported significant variation in participation rates of 18- to 20-year-olds between geographic areas (Birrell et al. 2008), with participation relatively low in almost all outer metropolitan areas of most capital cities (apart from the outer northern suburbs in Sydney).

The initiatives proposed in Chapter 3.2 to promote access to higher education, such as outreach activities with schools in low socio-economic areas, will be particularly relevant for higher education providers which service outer metropolitan areas. In addition, providers in these areas will attract a higher share of the loading for low socio-economic status students.

The panel has concluded that additional Australian Government funding should not be earmarked to support the continuation of small campuses in outer metropolitan areas. Rather, campuses should grow and decline in response to demand and planned decisions by providers. A need may exist for rationalisation of some smaller campuses or restructuring of provision in these areas to enhance quality, and structural adjustment funding should be made available to enable this to happen. This is discussed further in Chapter 4.2.

### 3.7.4 National, state and regional cooperation

More cooperative planning and negotiation must occur between key stakeholders if Australia is to address the significant challenges associated with provision of higher education in outer metropolitan and regional areas. These key stakeholders are universities currently delivering in these areas, Australian, state, territory and local governments, and other organisations such as regional development agencies. A cost-effective and sustainable approach to the complex challenges presented by the current pattern of provision of higher education in outer metropolitan and regional areas will require collaboration, common sense and considerable goodwill on the part of many disparate stakeholders.

The Australian Government should initiate a process to determine whether the current pattern of outer metropolitan and regional provision is appropriate, given current and projected needs. This should involve consultation with key stakeholders, including governments at all levels and other organisations such as regional development agencies.

**Recommendation 18**

That the Australian Government initiate a process with key stakeholders to determine the needs of outer metropolitan and regional areas for higher education and the best ways to respond to those needs.