The practicalities of growth: exploring attainment targets for enrolments

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The practicalities of growth
– exploring attainment targets for enrolments

Introduction
This is the second research briefing in the Joining the Dots series for 2011. This briefing acts as a follow-on from the first Joining the Dots paper, released in late April 2011, relating to student demand (Edwards, 2011). It explores the Australian Government’s university attainment target, examining the implications of this policy, and providing a new perspective for understanding the parameters of this target.

In 2009, following the Review of Australian Higher Education carried out by Bradley, Noonan, Nugent and Scales (2008), the Australian Government provided a response in the form of a policy document titled ‘Transforming Australia’s Higher Education System’. One of the major policy proposals adopted in the document was the target for boosting the educational profile of Australians: ‘by 2025, 40 per cent of all 25 to 34 year olds will hold a qualification at bachelor level or above’ (Australian Government, 2009, p. 12).

The policy was a slight amendment of Bradley Review Recommendation 2, where the Panel had suggested that the target should be set for 2020, but in considering the size (and arguably impossibility [Birrell & Edwards, 2009]) of this task, the Government extended the proposed timeframe by five years.

While legitimate questions may be asked about the merit of setting targets, given the attention and focus this target has provided around discussion of the future of higher education in Australia, Bradley’s message justifying the target appears to ring true:

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 policy makers on what needs to be done to achieve the target and can help the community to hold policymakers accountable (2008, p. 19).

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However, while there is a clear and transparent figure – 40 per cent – the actual numbers required to achieve the figure are far from clear. This briefing paper explores the actual numbers and details some different assumptions about how the end product of attainment impacts on the levels of provision that will be required in the Australian higher education sector.

The main findings presented here are:

- Achieving the 40 per cent attainment target will (coincidentally) require a 40 per cent increase in the number of people aged 25 to 34 with a university qualification – twice the anticipated growth rate of this age cohort between 2010 and 2025.
- Recent growth in attainment has been strong with the proportion of 25 to 34 year-olds holding a bachelor degree or above rising from 24.0 per cent in 2001 to 34.2 per cent in 2010.
- If the recent increasing attainment trend continues, achieving the 40 per cent target appears a foregone conclusion. However, a more careful examination of the figures suggests caution in this assumption.
- While attainment has grown over the past decade, actual participation rates in Australian higher education for the 20 to 24 year age group have experienced only modest increases. Therefore, domestic higher education output does not appear to have been driving growth in attainment levels in Australia.
- The key driver of attainment increases over the past decade appears to be the skilled migration program. Further strong growth is also provided by graduating international students, some of whom remain in Australia following graduation.
- Recent increases in student demand and enrolment in Australian universities are the first signs that the domestic market may be in a position to contribute meaningfully to continued growth in university attainment levels.

The findings and discussion in this briefing provide the basis for understanding the attainment targets that Australia is aiming to achieve. Discussion of these targets flows directly into questions about the implications for enrolments and student numbers in the system. Certainly, estimates created for the Victorian Government’s Tertiary Education Plan suggest that achieving enrolment numbers to match targets is likely to be a substantial task (Edwards, 2009a). The issue of converting attainment targets into student numbers – the number of students that will need to be enrolled so that the attainment targets can be reached – will be explored in a subsequent Joining the Dots research briefing.
Translating the target to numbers

In 2010, according to figures collected by the Australian Bureau of Statistics (ABS), 34.2 per cent of people aged 25 to 34 in Australia held a bachelor degree or higher qualification (ABS, 2008). Based on population estimates for 2010, 1.05 million people aged 25 to 34 in Australia have at least a bachelor degree qualification.

By 2025, it is estimated that there will be about 3.68 million persons aged 25 to 34 in Australia. If the attainment target of 40 per cent is to be reached, 1.47 million from this age cohort will need to have at least a bachelor-level qualification.

So, for the target to be achieved, in 2025 there will need to be 422,000 more people in this age cohort with a bachelor degree than there were in 2010. This equates to a 40 per cent increase over this period. As such, (and quite neatly) to achieve 40 per cent attainment, Australia needs a 40 per cent growth in the number of people with this level of qualification between 2010 and 2025.

Given that the overall number of 25 to 34 year olds is forecast to increase by a more modest 20 per cent, the scope and context for this growth is notable: essentially, growth in numbers for this group with a bachelor degree will need to grow at twice the rate of anticipated population increases. These figures are summarised in Table 1.

It is possible to chart a basic trajectory for Australia over the coming 15 years in order to reach the attainment target in 2025. A potential trajectory for growth is shown in Figure 1 and Table 2, applying a yearly attainment growth figure to the ABS population forecast for the 25 to 34 year age group. According to these calculations, the required 5.8 percentage point increase in attainment from 2010 to 2025 could be achieved by ensuring interim targets of growth of 1.5 percentage points every five years. In the figure and table below, this would mean a target of 36.1 per cent in 2015 and a target of 38.1 per cent in 2020.

Table 1: Basic figures for achieving attainment rate, 25 to 34 year olds, 2010 and 2025

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Change (required)</th>
<th>2010 to 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (25 to 34 years of age)</td>
<td>3,067,139</td>
<td>3,677,393</td>
<td>610,254</td>
</tr>
<tr>
<td>Persons with bachelor degree or above</td>
<td>1,048,962</td>
<td>1,470,957</td>
<td>421,996</td>
</tr>
<tr>
<td>Attainment rate (bachelor +)</td>
<td>34.2%</td>
<td>40%</td>
<td>5.8 % points</td>
</tr>
</tbody>
</table>

Note: base population data for 2010 and 2025 from ABS, Population Projections Australia, Series B, cat. 3222.0
The practicalities of growth

Table 2: Potential interim targets for achieving Australian attainment target by 2025, 25 to 34 year-olds

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (25 to 34 years of age)</td>
<td>3,067,139</td>
<td>3,382,951</td>
<td>3,582,725</td>
<td>3,677,393</td>
</tr>
<tr>
<td>Persons with bachelor degree or above</td>
<td>1,048,962</td>
<td>1,222,429</td>
<td>1,363,943</td>
<td>1,470,957</td>
</tr>
<tr>
<td>Attainment rate (bachelor +)</td>
<td>34.2</td>
<td>36.1</td>
<td>38.1</td>
<td>40</td>
</tr>
</tbody>
</table>

Note: base population data from ABS, Population Projections Australia, Series B, cat. 3222.0

Figure 1: Tracking attainment numbers and attainment rates – a potential trajectory to 2025
Note: base population data from ABS, Population Projections Australia, Series B, cat. 3222.0
Explaining recent trends in attainment

Presented in terms of percentage point gain and over a 16-year period, the achievement of these targets appears to be relatively straightforward. When the recent trajectory of growth in the attainment rate is considered, it is easy to conclude that these targets will be easily reached, if not outstripped by 2025. A conclusion along these lines was made in a paper by the Group of Eight that states ‘a continuation of the recent trend growth in degree attainment would see the Government’s 40 per cent target for the 25-34 year group exceeded by 2015’ (2010, p. 2).

Figure 2 charts the attainment rates of the 25 to 34 year-old population in Australia over the past decade. It details a remarkable rise of more than 10 percentage points over a decade – from 24 per cent in 2001 to 34.2 per cent in 2010. At each point in the series from the Survey of Education and Work (ABS, 2010) there has been an increase in attainment apart from that in 2010, which was down on the large figure recorded in 2009. A trend line has been included in this figure to provide an indication of the overall trajectory during this time.

As argued in the Group of Eight paper, if this trend were to continue Australia would reach the 40 per cent attainment figure by the middle of this decade (Group of Eight, 2010). While this conclusion is appealing, an examination of national attainment level trends over recent years does not provide the full picture of future attainment rates.
Figure 3 provides a reality check and a context for understanding the drivers of attainment in Australia over the past decade. The figure tracks both the 25 to 34 year-old attainment rate from 2001 to 2010 alongside the participation rate of 20 to 24 year-olds in courses for a bachelor degree or above. While the attainment rate has experienced steady growth over the past decade, the same cannot be said for levels of participation in bachelor degrees by the next group of people entering the 25 to 34 year age bracket.

Further, while the number of persons aged 25 to 34 in the population holding a bachelor degree or above has increased by 54 per cent over the past decade, the number of domestic bachelor degree completions in this time has only grown by 15 percent (DEEWR, 2001–2009).

These findings show that the growing attainment rates in Australia over the past decade have not necessarily been produced by growth in domestic demand. So what is contributing to this noteworthy and well-publicised growth in attainment?

Figure 3: Participation rates in bachelor degree or above (20 to 24 year-olds) and bachelor degree attainment rates (25 to 34 year-olds), 2001 to 2010
Source: ABS Survey of Education and Work 2001 to 2010

Figure 4: Number of settler arrivals in Australia, 25 to 34 year-olds with professional occupations, 2000-01 to 2008-09
Source: Department of Immigration and Citizenship, Overseas Arrivals and Departures data extracted from Birrell et al. (2010), Table 5.
The most plausible explanation for this attainment growth is the increase in numbers from the skilled migration program in the past decade. A key ambition of this program has been to attract young professionals to Australia. The program has had great success in doing this, with the number of persons aged 25 to 34 arriving in Australia over this period growing rapidly. Figure 4 provides an indication of the growth in the number of persons in the key 25 to 34 year age group who have a professional occupation\(^1\) arriving in Australia between 2000–01 and 2008–09. The annual numbers have grown from about 19,000 in the first year of this time series to 35,500 by 2008–09.

To put these figures in perspective, the number of domestic bachelor degree completions in Australia in 2009 was about 98,500. While a crude comparison, the annual migration intake was equivalent to just over one-third of the domestic bachelor output in 2009, whereas this figure was only just over 20 per cent a decade earlier. Hence the role of the skilled migration program, especially in boosting the number of degree-qualified persons in the target age category – 25 to 34 year-olds - is notable and particularly important in providing the context for understanding recent growth in attainment numbers in the Australian population.

A further explanation for attainment growth can be found in the changing pattern of international student completions in Australia over the 2001 to 2009 period. While this growth has been well documented, the extent to which it could be contributing to increases in attainment rates for Australia have not been given as much attention. Figure 5 shows that over this period completion numbers at the bachelor level doubled for the international cohort (by comparison, domestic student completions increased at a modest 15 per cent). By 2009 about 43,000 international students graduated from Australian universities. While a number of these students return home, data compiled by the ABS suggest that at least one-third are successful in applying for a permanent residency visa on completion (ABS, 2007).

Therefore, a very modest estimate finds that the number of former international students remaining in Australia each year after graduating with a bachelor degree would alone have grown from about 7,000 in 2001 to 14,500 in 2009. Given the potentially large additional cohort of international students who remain in Australia following graduation on Graduate Skills (subclass 485) visas (Birrell, et al., 2010), which often act as a bridge to permanent residency, the impact of this group could be much larger than the estimate above.

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\(^1\) Migration data does not contain information about qualification levels; therefore, ‘professional occupation’ has been used as a proxy for a bachelor degree or above. This is consistent with previous work using this data (see Birrell, Rapson, & Smith, 2010; Edwards, 2009b, 2010).
Sustaining growth in attainment

Australia appears to be on track to achieve the attainment rate target set by the Australian Government of 40 per cent of the 25 to 34 year-old population holding a bachelor degree or above by 2025. Recent trends seem to have been the result of a strong migration program and increasing international student numbers rather than increases in participation in higher education at the domestic level.

While there are many positives to this outcome, and acknowledging the role of migration as an essential building block of Australian society, the fluctuating nature of migration and international student numbers means that assuming growth will continue and attainment targets will be met based on these trends of the past decade may be unwise.

Substantial growth in the number of skilled migrants in the key 25 to 34 year age group has provided a strong platform for boosting university attainment rates in Australia over the past decade. However, if migration growth is not sustained, the consequences for future attainment levels in Australia will be notable. This is because a gap in achievement levels will be created as the cohort of arrivals since the mid-2000s shown in Figure 4 begins to ‘age-out’ of the 25 to 34 year age group. As shown from the trends in Figure 3, the group of people currently in Australia about to move into the 25 to 34 year age bracket is not going to fill this space.

Recent changes to the skilled migration program provide a key indication that growth in this area of the past decade may not continue in the same direction in the future.

In addition to this, unease in the international student market over the past few years as a result of a mixture of changing currency prices, changes to visa conditions, negative publicity about safety, and the Global Financial Crisis have provided further perspective in relation to the role that this market plays in Australian higher education and in the economy more generally.

As such, there is a need to ensure that the domestic contribution to increasing the educational profile of the Australian population is maintained. As documented in the first Joining the Dots research briefing (Edwards, 2011), and subsequently confirmed by the release of the DEEWR Applications and Offers data for 2010 and 2011 (DEEWR, 2011), universities are attracting domestic students at levels not previously recorded. These developments are encouraging for policymakers who have set ambitious attainment targets, although the data in this briefing provides evidence to suggest this growth is only a starting point, and it is uncertain whether it is sustainable.

This briefing paper has provided a new perspective from which to interpret and consider the achievement of the Government’s university level attainment targets. However, this is only part of the story. Exploring the next steps – how commencement and completion numbers in Australian universities might translate into attainment targets – is a topic for a subsequent Joining the Dots research briefing.

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References


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