## Education overview



## In 2006, one in four Australians were attending an educational institution.

Formal education in Australia is undertaken through schools, Technical and Further Education institutions (TAFE), universities and other tertiary institutions, with increasing diversity in the range of courses offered by these institutions. In the 2006 Census, 4.6 million people of all ages reported that they were attending an educational institution.

In Australia in 2006, school attendance was compulsory between the ages of 6 and 15 years (16 in Tasmania and Western Australia). Some states are moving towards increasing the leaving age to $17 .{ }^{1}$ Along with this, there is a growing recognition of the role early childhood education plays in laying a strong foundation for schooling outcomes and successful transitions into further education and the labour market. In 2006, $72 \%$ of Australian students were children and young people at pre-school, primary and secondary school.

Vocational education provides specialised technical courses with direct relevance to industry, as well as a range of self-help or selfimprovement classes, accessible to anyone in the community. Just over 400,000 people attended a TAFE institution in 2006-9\% of all students. Participation by Indigenous Australians and people in rural and remote areas in this sector has been increasing. ${ }^{2}$ There is also a trend for vocational courses to be offered as part of the curriculum in secondary schools.

The Australian higher education sector plays a vital role in Australia's intellectual, economic, cultural and social development. It educates a significant part of the future workforce,

## Students in Australia

|  | Students(a) |  |
| :--- | ---: | ---: |
| Type of institution | ‘000 | \%(b) |
| Pre-school | 307.8 | 6.7 |
| Primary school | $1,696.8$ | 37.0 |
| Secondary school | $1,275.1$ | 27.8 |
| TAFE | 428.0 | 9.3 |
| University or other <br> tertiary institution | $\mathbf{7 4 5 . 4}$ | 16.3 |
| Other | $\mathbf{4 5 8 1 . 2}$ | $\mathbf{1 0 0 . 0}$ |

(a) Excludes overseas visitors in Australia for less than one year.
(b) Excludes people who did not state whether they attended an educational institution or the type of institution they attended.
develops people's skills and provides research opportunities, as well as being a major employer in the Australian community. In the 2006 Census, 745,000 people ( $16 \%$ of all students) reported that they were attending university or another tertiary institution.

## Pre-school education

Pre-schools provide a range of educational and developmental programs (generally 2 to 3 days per week) to children in the year immediately before they commence full-time schooling and also, in some jurisdictions, to younger children. ${ }^{1}$ There is growing recognition of the importance of early education for competence and coping skills that can affect learning, behaviour and health outcomes throughout life. ${ }^{3}$ The Australian Government is focussing on ensuring that all children, no matter where they live, have access to a quality pre-school program in the year before starting school. ${ }^{4}$

Proportion of 4 year olds at pre-school


According to the 2006 Census, 308,000 children aged 3, 4 and 5 were attending preschool. For Australia as a whole, the average age at which children attend pre-school was 4: in 2006, 64\% of 4 year olds attended pre-school. A lower proportion of Indigenous 4 year olds attended pre-school (52\%).

In 2006 there were marked differences in participation in pre-school between the states: this mainly relates to the history of pre-school and other early pre-compulsory education in each state or territory. For example, in Western Australia similar proportions of 4 and 5 year olds attend pre-school. In Queensland, a lower proportion of 4 year olds than 5 year olds attend pre-school. These patterns partially relate to the older age at which children traditionally start school in these states. In 2006, Queensland was in a transition period when the education year previously known as pre-school was becoming the first year of primary school known as Prep.

Another factor affecting reported participation in pre-school is differences in terminology across the states and territories. Specifically, 'kindergarten' is a common term for preschool education in Tasmania, Western Australia and Victoria. In Queensland in 2006, kindergarten referred to the year prior to the pre-school year. In New South Wales and the Australian Capital Territory, kindergarten describes the first year of school. Because of the different meanings, the term 'kindergarten' could not be used in the 2006 Census question. This may have affected the response rate in those states which use kindergarten to describe the pre-school year.

## School students

School education aims to provide students with the foundational skills, knowledge, understanding and values necessary for ongoing learning, employment and full participation in society.

## Census data about Schools

The census measures attendance of school students rather than enrolment, which is reported by the Australian Bureau of Statistics (ABS) through the National Schools Statistics Collection. This, along with the fact that information in the census is self-reported, or reported by parents on children's behalf, means that the number of school students measured by the census is lower than that measured by the National Schools Statistics Collection. Even so, the census provides valuable information about the characteristics of students and their families, across all areas of Australia.

It is not possible to derive participation rates for school students aged 6 to 14 years from census data.

In the 2006 Census, there were 1.7 million students attending primary school and 1.3 million attending secondary school. This was an increase of less than $1 \%$ in the total number of students since 1996: a $5 \%$ increase in the number of secondary students and a $2 \%$ decline in the number of primary students. This decline can be attributed to low birth rates in the 10 years before the 2006 Census resulting in smaller cohorts of children entering school.

In 2006 there were 72,000 Indigenous students attending primary school-a $17 \%$ increase from 1996 when there were 61,000 students reported. Over the same 10 year period, the number of Indigenous secondary students increased by $46 \%$ from 27,000 to 40,000 . Some of this increase may relate to a higher proportion of people reporting that they were Indigenous in the 2006 Census than in 1996.

A small proportion of school students (less than $1 \%$ overall) reported that they were studying part-time in 2006, but the numbers have been gradually increasing over time. The likelihood of studying part-time increased with age and was more common in the later years of secondary school.

## The location of school students

Across the states and territories of Australia, the proportion of the population who were school students in 2006 ranged from $16 \%$ to $17 \%$. Like the rest of Australians, most school students (88\%) live in Major Cities or Inner Regional Areas of Australia (see Glossary).

Proportion of population who were school students: Top 10 Regions(a)

(a) Regions are Statistical Subdivisions.

In 2006, the highest proportions of school students tended to be in the outer regions of the major cities such as places like Beaudesert Shire Part A (Qld) (21\%) and Tuggeranong (ACT) (21\%). Conversely the lowest proportions of school students tended to be in inner city areas such as Inner Brisbane and Inner Melbourne (both 6\%).

## Government and nongovernment schools

The Australian school system comprises government and non-government schools. Government schools are administered by state and territory governments. Non-government schools are administered by a range of religious, community or private groups. In the census they are grouped into Catholic and other non-government schools.

The introduction of needs-based funding by the Australian government in the $19705^{5}$ has led to a gradual increase in the number of nongovernment schools. Overall, $65 \%$ of students attended a government school in 2006. Of the rest, $21 \%$ were in Catholic schools and

Proportion of students in government and non-government schools 1986-2006


Government and non-government school attendance

|  | Government <br> Catholic | Other non- <br> government |  |
| :--- | ---: | ---: | ---: |
|  | $\%$ | $\%$ | 12.6 |
| NSW | 65.2 | 22.2 | 14.1 |
| Vic. | 63.7 | 22.3 | 14.8 |
| QId | 67.3 | 17.9 | 17.0 |
| SA | 64.2 | 18.9 | 15.3 |
| WA | 65.0 | 19.7 | 11.9 |
| Tas. | 70.5 | 17.6 | 12.4 |
| NT | 74.0 | 13.6 | 12.7 |
| ACT | 59.1 | 28.3 | $\mathbf{1 4 . 0}$ |
| Aust. | $\mathbf{6 5 . 3}$ | $\mathbf{2 0 . 8}$ |  |

$14 \%$ were in other non-government schools. Indigenous students were more likely than their non-Indigenous counterparts to attend a government school (84\% compared with 64\%).

Within each state and territory, the distribution of students between government and Catholic schools varied. The Australian Capital Territory had the lowest proportion of students attending government schools, at 59\%, while the Northern Territory had the highest, at $74 \%$. Balancing this, the Northern Territory had the lowest proportion of students attending Catholic schools (14\%), while the Australian Capital Territory had the highest (28\%). In contrast, all the states and territories had reasonably similar proportions of students attending other non-government schools, ranging from $12 \%$ in Tasmania to $17 \%$ in South Australia.

The proportion of students attending government schools has been declining since the late 1970s, and fell by $8 \%$ between 1986 and 2006. The proportion of students in other non-government schools increased from $10 \%$ to $14 \%$ between 1996 and 2006. The reasons behind these trends are complex. Strong economic growth resulting in steady increases in employment, household incomes and wealth may mean that a greater proportion of the population is able to choose nongovernment education. ${ }^{6}$ Other explanations that have been put forward are: the emergence of new independent schools, including parentcontrolled Christian schools; the changing share of government resources received by government and non-government schools; and public concern about the ability of some government schools to deliver high quality education. ${ }^{7,8}$

## Participation in noncompulsory schooling

Remaining in education beyond the compulsory years of school can assist a young person's transition into the labour force and broaden their opportunities later in life. A key measure of the level of non-compulsory school participation is the proportion of 16 year olds who are attending school.

In $2006,84 \%$ of 16 year olds were attending school. From as early as 1971, when less than half 16 year olds (48\%) attended school, until the early 1990s, there was a gradual increase in participation beyond the compulsory years. This tapered off in the late 1990 s and early $21^{\text {st }}$ century. The same pattern is evident for 17 year olds, the age at which most young people complete secondary school.

Increased participation in the last years of school is associated with the growing importance of educational qualifications for successful employment outcomes. Changes in the labour market have meant that fewer jobs are available for people who have not completed Year 12, while more jobs require TAFE or university qualifications. ${ }^{9}$

Indigenous students contributed to the trend of increasing participation in non-compulsory schooling. Although participation rates were lower among Indigenous 16 and 17 years olds than their non-Indigenous counterparts in each census year, they also increased between 1986 and 2006. For example, between 1996 and 2006, the proportion of Indigenous 16 year olds attending school increased from $50 \%$ to $59 \%$, compared with $81 \%$ to $85 \%$ of nonIndigenous students.

Girls are more likely to continue on at school for longer than boys. In 2006, 81\% of 16 year old boys and $86 \%$ of 16 year old girls attended school. Among 17 year olds, $63 \%$ of boys and $71 \%$ of girls were still attending school. However both girls and boys were more likely to stay at school than they were two decades ago. In 1986, $65 \%$ of boys and $68 \%$ of girls were still at school at age 16 and by age 17 this had dropped to $39 \%$ and $42 \%$ respectively.

The 2006 Census showed that 26,900 secondary school students aged 15-19 had arrived in Australia between 2002 and 2006. A higher proportion of these students attended a government school ( $63 \%$ ) than Australian-born secondary school students (59\%). They were also more likely to attend a non-government

16 and 17 year olds attending school

school (excluding Catholic schools) than Australian-born students. Conversely they were less likely to attend a Catholic school.

## Continuing education after school

Many Australians continue to study beyond their school years at Technical and Further Education institutions (TAFE), university or other tertiary institutions. In 2006, there were 1.2 million students aged 15 and over attending educational institutions other than schools. These students comprised $8 \%$ of Australians aged 15 and over: 5\% attending a university and $3 \%$ TAFE. Over half of these students were women (55\%). Participation in non-school education was higher in 2006 than 1986 across all ages. For more information on participation in non-school education over time, see 'Adult education across the generations', p. 123-127.

Over half (55\%) the students who were attending a non-school educational institution were young people aged $15-24$. TAFE students had an older age profile than university students: $40 \%$ were aged 30 and over compared with $27 \%$ of university students.

Age profile of TAFE and university students


## 16 year olds who have left school

A range of personal, institutional, and socio-economic factors influence an individual's decision to leave school early. ${ }^{10}$ The census can provide information on some of these factors, such as participation in other types of education, employment and location issues.

In 2006, 41,000 16 year olds (16\%) reported that they were not attending school. Most of these had completed Year 10 (82\%) but only $4 \%$ reported completing Year 12. Of those not attending school, one third (32\%) were still participating in education, mainly at TAFE.

Of 16 year olds who were not attending an educational institution, $56 \%(14,800)$ were employed. Of these, $61 \%$ worked full-time. The most common occupations of employed 16 year olds were Technicians and Trades Workers (31\%), Labourers (28\%) and Sales Workers (23\%). Almost one quarter of 16 year olds in the labour force were unemployed.

The vast majority of 16 year olds live in Major Cities and Inner and Outer Regional Areas (98\%). Across these regions the proportion of 16 year olds not in education ranged from $9 \%$ to $15 \%$. In contrast, $21 \%$ of 16 year olds in Remote Areas, and $50 \%$ in Very Remote Areas were not in education. Lack of access to educational facilities in remote parts of Australia compels children to move to large towns and cities to complete their education.

Participation in education of 16 year olds by Remoteness Areas


Proportion of students studying part-time


TAFE students of all ages were more likely to be studying part-time than university students ( $67 \%$ compared with $32 \%$ ). Even among those recently out of school, over half of TAFE students were part-time ( $56 \%$ of $15-24$ year olds). In contrast, most young university students were studying full-time (89\%). However, the proportion of students studying part-time at both university and TAFE increased with age.

The difference in full-time and part-time study patterns of university and TAFE students can be partly explained by their employment status. Overall, the same proportion of students at both TAFE and university were employed (66\%). However, a much higher proportion of employed TAFE students were working full-time (57\%) than employed university students (33\%). The difference in full-time and part-time employment was greatest among 15-24 year olds, where $57 \%$ of employed TAFE students worked full-time compared with $13 \%$ of employed university students. For more information about the changes in work patterns of students over time, and their occupations, see 'Adult education across the generations', p. 123-127.

Proportion of employed students working full-time


## Overseas-born students

Australian universities and TAFEs attract many overseas students. According to the 2006 Census there were 137,100 tertiary students who were born overseas and had recently arrived in Australia. Of these, $72 \%$ were university students and $28 \%$ were TAFE students (compared with $62 \%$ and $38 \%$ of Australian students respectively). The largest group of these students were born in Chinese Asia (26\%). ${ }^{11}$ Recently arrived tertiary students had an older age profile than Australian-born students. Reflecting the high proportion of university students among recently arrived tertiary students, a much higher proportion were full-time students ( $85 \%$ compared with $51 \%$ of Australian students).

## Location of university and TAFE students

Between $7 \%$ and $8 \%$ of people in every state were university or TAFE students. The Australian Capital Territory had a higher proportion of non-school students (13\%), and the Northern Territory had a lower proportion (6\%) than the states. The majority of students attending non-school educational institutions lived in Major Cities (79\%). Reflecting this, the areas in Australia with the highest proportion of resident university or TAFE students were all located in capital cities. One in five people living in North Canberra were university or TAFE students, the highest proportion in Australia. Bathurst (NSW) had the highest proportion of resident students (10\%) of all regions outside the capital cities.

While university students were strongly clustered in Major Cities (83\%), this was less the case for TAFE students. A slightly lower proportion of TAFE students lived in Major

Proportion of TAFE and University students: Top 10 regions(a)

(a) Regions are Statistical Subdivisions.

Cities (71\%) than university students; instead higher proportions of TAFE students lived in Inner Regional Areas (20\% compared with $12 \%$ ) and Outer Regional Areas ( $8 \%$ compared with 4\%). These differences reflect the varying locations of non-school educational institutions. University campuses tend to be located in capital cities and regional centres, while TAFEs and other tertiary institutions are more widely spread across the country and so are more accessible to those living in regional Australia.

In 2006, a large proportion (46\%) of 1.2 million students who were attending a non-school institution reported that they already had a non-school qualification. Of these students, $24 \%$ had completed a qualification in the field of Management and commerce, 18\% in Society and culture and $10 \%$ in each of Health and Engineering and related technologies. This group undertaking further training may represent people continuing their education for career development or to extend current knowledge in their profession; or people making a career change.

## Qualifications

## Non-school qualifications rising

In $2006,50 \%$ of the population aged 20 and over had a non-school qualification: $29 \%$ with an Advanced Diploma, Diploma or Certificate qualification and $19 \%$ with a Bachelor degree or above. The proportion of people with a non-school qualification rose considerably between 1991 and 2006. Over this period, the balance shifted from vocational education to university. The proportion of the population aged 20 years and over with a university degree almost doubled from $10 \%$ to $19 \%$, while the proportion with an Advanced Diploma, Diploma or Certificate rose more slowly, from $23 \%$ to $29 \%$.

Highest level of education(a)

(a) Population aged 20 years and over.

People with qualifications(a), 1991 to 2006

(a) Proportion of people with a non-school qualification aged 20 years and over.

## No change in rate of higher degrees among graduates

In 2006, $5 \%$ of people aged 20 and over had a higher degree (for example a Postgraduate diploma, Master's degree, or Doctorate), more than double the proportion in 1991 (2.4\%). Even so, the rate at which people with a Bachelor degree go on to attain higher degrees has not changed. In 2006, 26\% of all those with a Bachelor degree or above had a higher degree. Similarly, in 1991, 25\% had a higher degree.

## Each generation better educated than the last

The level of educational attainment in the community has risen steadily with each successive generation. (A description of each generation can be found in the article, 'From generation to generation', p. 9-14.) Two thirds (66\%) of the Oldest Generation reported their highest level of schooling completed as Year 11 or below, an indicator of the proportion of the population who did not complete school. For each generation, the proportion of the population who did not complete school has been lower, from $53 \%$ of the Lucky Generation, to $36 \%$ of the Baby Boomer Generation and $20 \%$ of Generation X and Y.

For the older three generation groups, there was little difference in the proportion of people whose highest level of schooling completed was Year 12: $11 \%$ of the Oldest Generation, $10 \%$ of the Lucky Generation and $12 \%$ of the Baby Boomer Generation. However, the proportion was substantially higher for Generation X and Y , at $23 \%$.

The proportion of people reporting a nonschool qualification was higher with each successive generation, from $23 \%$ of the Oldest Generation, to $37 \%$ of the Lucky Generation, $53 \%$ of Baby Boomers and $57 \%$ of Generation

## Comparing qualifications over time

In the 2001 and 2006 Censuses, level and field of highest qualification were categorised according to the Australian Standard Classification of Education (ASCED). The 1991 and 1996 Censuses categorised level and field of highest qualification according to the Australian Bureau of Statistics Classification of Qualifications (ABSCQ). Although ABSCQ qualification categories have been broadly aligned to ASCED categories, they do not match exactly.

For earlier census data on education, differences in the classification structure and coding process pose practical difficulties which preclude detailed comparison with more recent census data.

For further information refer to ABS, 2001, Australian Standard Classification of Education, cat. no. 1272.0.

X and Y . The smaller increase between the Baby Boomer Generation and Generation X and $Y$ reflects the fact that many of the younger members of this generation are still students at TAFE or university.

The higher level of educational attainment for each successive generation reached a point where more people in the Baby Boomer Generation and Generation $X$ and $Y$ held a non-school qualification than those who did not in 2006, in contrast to older generations. For further information, see 'Adult education across the generations', p 123-127.

Generation's highest level of education completed(a)

(a) A description of each generation can be found in the article, 'From generation to generation', p. 9-14.

## More women gain qualifications

The changing role of women in Australian society is reflected in a narrowing of the gap in educational attainment between men and women. In 1991, $43 \%$ of men and $25 \%$ of women aged 20 and over reported holding a non-school qualification. In 2006, the gap was smaller: $56 \%$ of men and $45 \%$ of women held a non-school qualification. This can be attributed to the increasing participation in non-school education of women from the Baby Boomer Generation and Generation X and Y. See 'Adult education across the generations', p 123-127, for more information.

## Where qualified people live

Overall, people aged 20 and over with nonschool qualifications were more likely than those without non-school qualifications to live in the Major Cities of Australia ( $73 \%$ compared with 66\%). However, this differed by qualification. Of people with a Bachelor degree or above, $81 \%$ lived in Major Cities, compared with $68 \%$ of those with an Advanced Diploma, Diploma or Certificate. This reflects the different types of jobs available in different areas and the educational requirements of these jobs. For more information about regional differences in educational attainment, refer to 'Education across Australia' in Australian Social Trends 2008. ${ }^{12}$

## Qualifications and work

There is a strong relationship between qualifications, labour force status and income: those who are qualified are more likely to be employed and to have higher incomes. Of people aged 20-64 with a non-school qualification, $83 \%$ were employed, compared with $65 \%$ of those with no qualification. Another $2.9 \%$ of qualified people were unemployed, compared with $4.5 \%$ of those without a qualification. Only $14 \%(820,000)$ of qualified people aged 20-64 were not in the labour force compared with $30 \%$ of those without a qualification.

## Qualified men and women who are not in the labour force

Men made up 36\% of qualified people aged 20-64 who were not in the labour force. They were generally older than qualified men who were in the labour force: almost two thirds were aged 45-64 (65\%), compared with $39 \%$ of qualified men in the labour force. Many of these men may have retired early from their job, while some may have sustained an injury or disability preventing them from working. For more information, see 'Skills shortages', p 151-157.

Age profile of qualified men and women not in the labour force


Women made up two thirds of qualified people aged 20-64 who were not in the labour force. In contrast to qualified men not in the labour force, the highest proportion of qualified women were aged 30-39 (31\%), and their age profile was similar to those who were in the labour force. Over half the qualified women (51\%) who were not in the labour force were parents in a family with dependent children and so are likely to have taken time off midcareer to have children.

## Qualified people have higher incomes

Of the employed population aged 20-64, those with non-school qualifications were more likely to have bigher incomes ${ }^{13}$ than those without non-school qualifications. In $2006,42 \%$ of the former group received bigher incomes (that is, more than $\$ 1000$ per week) compared with $19 \%$ of the latter group. For further information about the relationship between education and income, see the 'Economic resources overview', p. 175-187.

## Fields of highest qualification

In 2006, the most common fields of study for people's highest non-school qualification were Engineering and related technologies and Management and commerce-with $21 \%$ and $20 \%$ of all people with non-school qualifications respectively (or 1.3 million people each). Within the former group, the most commonly held non-school qualifications were in Mechanical and industrial engineering and technology ( $23 \%$, or 303,000 people) and Electrical and electronic engineering and technology ( $22 \%$, or 291,000 people).

Between 1996 and 2006 the proportion of people reporting their highest qualification in the field of Management and commerce increased (from $17 \%$ to 20\%) and the proportion of people reporting Engineering and related technologies decreased (from 25\% to $21 \%$ ).

Highest non-school qualification: top 5 fields of study(a)

|  | 1996 | 2001 | 2006 |
| :--- | ---: | ---: | ---: |
| $\%$ | $\%$ | $\%$ |  |
| Engineering <br> and related <br> technologies | 25.3 | 23.3 | 20.6 |
| Management <br> and commerce | 17.3 | 19.1 | 20.4 |
| Society and <br> lulture | 9.1 | 10.3 | 11.3 |
| Health | 11.3 | 10.9 | 10.7 |
| Education | 9.7 | 9.4 | 9.5 |

(a) Proportion of persons aged 20 years and over with a non-school qualification who reported a field of study for their highest qualification.

## Endnotes

1 Steering Committee for the Review of Government Service Provision (SCRGSP) 2008, Report on Government Services 2008, Productivity Commission, Canberra.

2 National Centre for Vocational Education Research (NCVER) 2007, Australian vocational education and training statistics. Students and courses 2006, NCVER, Adelaide.

3 McCain, M. and Mustard, J.F. 1999, Reversing the Real Brain Drain: Early Years Study, Final Report, Ontario Children's Secretariat, Toronto.

4 Department of Education, Employment and Workplace Relations 2008, Universal Access to Early Childhood Education Guidelines 2007-08, <http://www.dest.gov.au/NR/rdonlyres/E6053E84-48A9-4F0C-A64A-DD48A09E8692/20838/ Guidelines_UAECE_March2008.pdf $>$.

5 Wilkinson, I.R. et al. 2007. A History of State Aid to Non-government Schools in Australia, Commonwealth of Australia, 2007.

6 Toth, J. 2007, 'Australian childcare services and schools: participation and spending trends', Consumer Trends, February 2007, Economics@ANZ.

7 Australian Bureau of Statistics (ABS) 2006,
'Government and non-government schooling' in Australian Social Trends 2006, cat. no. 4102.0, ABS, Canberra.

8 Buckingham, J. 2001, 'The case for school choice and how to fund it' in Policy, Vol. 17, No. 3, p. 1824.

9 ABS 2001, 'Trend in completing school' in Australian Social Trends 2001, cat. no. 4102.0, ABS, Canberra.

10 Department of Education Training and Youth Affairs 2001, National evaluation report: Full service schools program, 1999 and 2000,
<http://www.dest.gov.au/sectors/school_education/ publications_resources/profiles/evaluation_report_f ull_service_schools_programme.htm $>$.

11 Chinese Asia includes China (excluding SARs and Taiwan Province), Hong Kong (SAR of China), Macau (SAR of China), Mongolia and Taiwan.

12 ABS 2008, 'Education across Australia' in Australian Social Trends 2008, cat. no. 4102.0, ABS, Canberra.

13 Income is gross personal income. For details of the personal income groups used see Glossary.

