



**Australian Social Trends
2007**

**Article: Qualification
profile of Australians**

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SYMBOLS AND USAGES

billion	1,000 million
kg	kilogram
m	metre
n.a.	not available
n.e.c	not elsewhere classified
n.p.	not published
n.y.a.	not yet available
no.	number
'000	thousand
'000m	thousand million
\$	dollar
\$m	million dollars
\$b	billion dollars
\$US	American dollar
%	per cent
*	estimate has a relative standard error of 25% to 50% and should be used with caution
**	estimate has a relative standard error of greater than 50% and is considered too unreliable for general use
. .	not applicable
—	nil or rounded to zero (including null cells)

Where figures have been rounded, discrepancies may occur between the sums of the component items and totals.

Qualification profile of Australians

The proportion of men aged 25–64 years holding a non-school qualification increased from 54% to 63%, and for women from 41% to 56%, between 1996 and 2006.

Educational attainment is an indicator of knowledge and skills obtained from the formal education process. Over the past decade, the educational attainment of Australians has been steadily rising. In 2006, over half of 25–64 year olds (59% or 6.3 million people) held a non-school qualification, up from 48% in 1996. This is consistent with employers requiring workers with greater skill levels to fill jobs in an increasingly technological workforce.

Highest level of non-school qualification – recent trends

Over the past decade, there has been a larger increase in the proportion of women aged 25–64 years with non-school qualifications than men. This has led to a gradual narrowing in the gap between men's and women's level of educational attainment. In 1996, the proportion of men aged 25–64 years with a non-school qualification (54%) was markedly higher than women (41%). In 2006, these proportions increased to 63% for men and to 56% for women.

The rise in the level of educational attainment over the past decade mostly reflects an increase in the proportion of people whose highest non-school qualification is a Bachelor or higher degree. Between 1996 and 2006, this proportion increased from 15% to 23% for men and for women from 14% to 25%.

Data sources and definitions

This article examines the qualification profile of Australians based on their highest level of non-school qualification. Data presented are for people aged 25–64 years and are from the ABS Survey of Education and Work.

Level of qualification is classified according to the *Australian Standard Classification of Education (ASCED), 2001* (ABS cat. no. 1272.0). Non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education and include:

- ◆ *Bachelor degrees or higher* comprising bachelor degrees (including honours), graduate diplomas and graduate certificates, masters degrees and doctorates.
- ◆ *Advanced diplomas and diplomas* which include advanced diplomas, associate degrees and diplomas.
- ◆ *Certificates I–IV* including certificates not further defined.

There has been less growth in the proportion of people whose highest non-school qualification is an Advanced diploma and diploma or below. The proportion of women with qualifications at this level increased from 27% to 30% over the last decade, while remaining stable for men (39%).

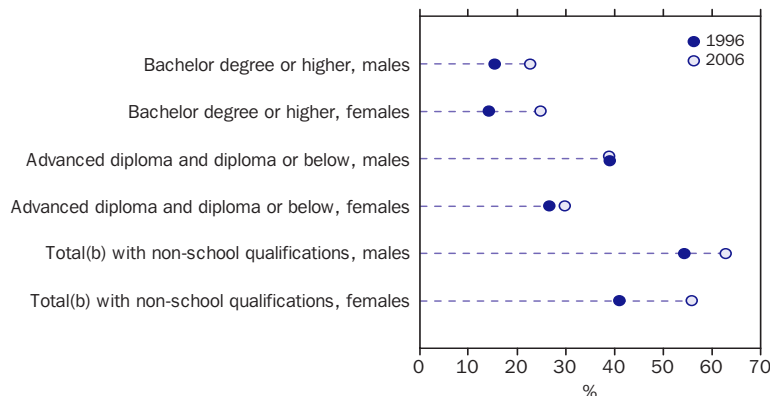
In 2006, the most common types of non-school qualifications held by men were Certificates I–IV (31%), followed by Bachelor or higher degrees (23%). These were also the most common non-school qualifications held by women, however a larger proportion of women held a Bachelor or higher degree (25%), while fewer held a Certificate I–IV (19%). This pattern reflects gender segregation in occupations, with women less likely than men to work in industries which require vocational training.¹

Sex and age

Educational attainment profiles also vary by age, with the rise in the level of educational attainment among people aged 25–64 years over the past decade being mainly due to a growing number of younger Australians gaining Bachelor or higher degrees.

For both men and women, there were higher proportions of 25–34 year olds whose highest non-school qualification was a Bachelor or higher degree than in older age groups. For example, 26% of men and 32% of women

Proportion of the population(a) with non-school qualifications



(a) Aged 25–64 years.

(b) Includes people whose qualification level could not be determined.

Source: ABS 1996 and 2006 Survey of Education and Work.

Level of highest non-school qualification — 2006

Age group (years)	Bachelor degree or higher	Advanced diploma and diploma	Certificate I-IV	Total with non-school qualifications(a)	
	%	%	%	%	'000
Males					
25-34	26.1	8.1	29.9	65.2	899.2
35-44	23.4	7.8	32.0	64.7	938.7
45-54	20.9	7.8	32.1	61.9	832.9
55-64	19.8	8.0	29.7	58.9	626.9
Total	22.7	7.9	31.0	62.9	3 297.7
Females					
25-34	32.2	11.1	19.7	64.1	895.5
35-44	24.8	10.8	21.3	58.0	865.8
45-54	24.2	10.9	19.5	56.0	777.6
55-64	16.0	8.8	16.3	42.4	456.2
Total	24.8	10.5	19.4	55.9	2 995.0

(a) Includes people whose qualification level could not be determined.

Source: ABS 2006 Survey of Education and Work.

aged 25-34 years held a Bachelor or higher degree in 2006, compared with 20% of men and 16% of women aged 55-64 years.

Across all age groups there were higher proportions of men than women with Certificate I-IV as their highest qualification. The proportion with these qualifications ranged from 30% to 32% for men and 16% to 21% for women, across all age groups.

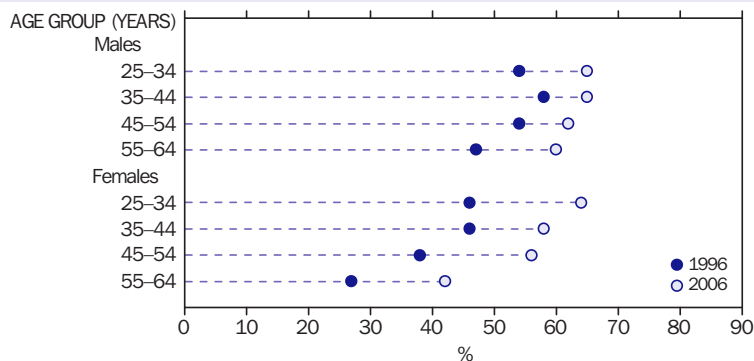
Comparisons by age also show a narrowing in the gap between men's and women's educational attainment over the period 1996 to 2006, particularly among younger age groups. Differences between age groups are consistent with the significant reshaping of

women's labour market and educational opportunities over recent decades (see *Australian Social Trends 2006*, Trends in women's employment, pp. 121-125).

Among people aged 45-64 years, a higher proportion of men (61%) than women (50%) held a non-school qualification in 2006. This in part reflects the greater educational opportunities, particularly in vocational areas, available to men of this generation. Differences between men's and women's educational attainment in this age group also reflect the tendency for women's role to have been seen in earlier generations to be predominately in child-rearing rather than in the paid workforce, with non-school qualifications seen as less relevant.

Among younger people (25-34 year olds), there was little difference in the proportion of men and women with non-school qualifications. This is consistent with the availability of similar opportunities for men and women in younger generations to study for non-school qualifications. In 2006, 65% of men and 64% of women aged 25-34 years held a non-school qualification.

Proportion of the population(a) with non-school qualifications by age



(a) Aged 25-64 years.

Source: ABS 1996 and 2006 Survey of Education and Work.

People(a) with non-school qualifications: field and level of highest non-school qualification — 2006

	Level of highest non-school qualification			Males	Females	Persons
	Bachelor degree or higher	Advanced diploma and diploma	Certificate I–IV			
<i>Field of study</i>	%	%	%	%	%	'000
Natural and physical sciences	7.5	1.9	0.3	3.7	3.3	220.9
Information technology	4.7	3.9	1.9	4.2	2.4	210.3
Engineering and related technologies	7.9	11.2	34.7	35.8	2.6	1 255.6
Architecture and building	1.8	2.2	11.8	11.1	0.9	392.0
Agriculture, environmental and related studies	2.0	3.7	3.0	3.7	1.6	170.5
Health	14.4	15.2	4.2	4.6	16.3	638.7
Education	15.3	8.8	1.0	3.6	12.9	502.9
Management and commerce	20.2	28.4	22.6	16.3	29.7	1 428.8
Society and culture	19.2	12.4	6.4	8.3	17.2	787.7
Creative arts	4.7	6.8	1.7	3.1	4.4	234.9
Food, hospitality and personal services	*0.1	4.2	11.7	4.4	7.1	360.3
Total(b)	100.0	100.0	100.0	100.0	100.0	6 292.7
	'000	'000	'000	'000	'000	'000
Total(b)	2 520.2	978.4	2 664.3	3 297.7	2 995.0	6 292.7

(a) Aged 25–64 years.

(b) Includes people whose field is not stated or inadequately described as well as people completing qualifications in mixed field programs.

Source: ABS 2006 Survey of Education and Work.

Field of study

Australia has a diverse education system, which allows people to gain qualifications in a broad range of fields. Study at some levels of attainment is associated with particular fields of study.

In 2006, the three most common fields of study among men aged 25–64 years holding non-school qualifications were Engineering and related technologies (36%), Management and commerce (16%), and Architecture and building (11%). For women the three most common fields were Management and commerce (30%), Society and culture (17%) and Health (16%).

For people whose highest non-school qualification was a Bachelor or higher degree, the most common fields of study were Management and commerce (20%), Society and culture (19%), Education (15%) and Health (14%). For Certificate I–IV, the most

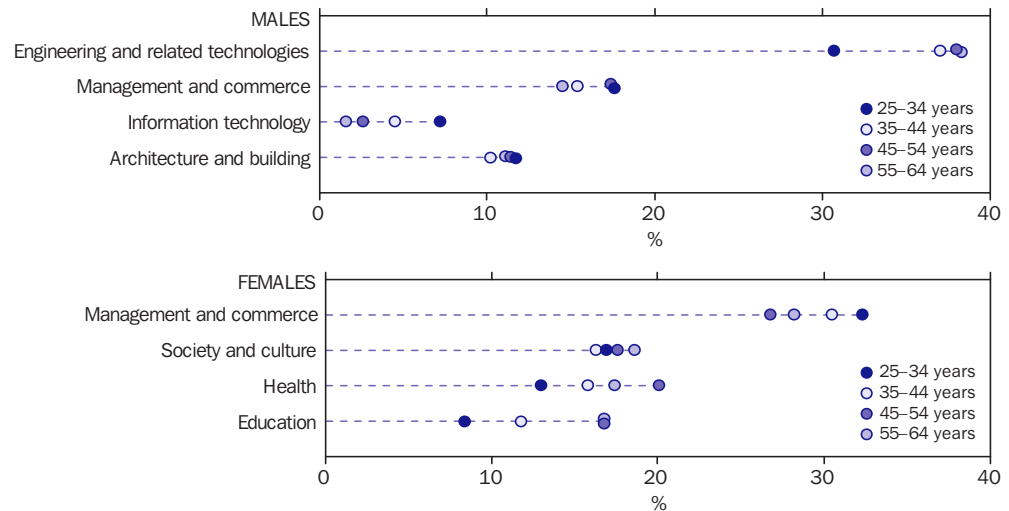
common fields of study were Engineering and related technologies (36%) and Management and commerce (22%).

...trends in qualification fields

A comparison across age groups may provide an indication of how fields of study have changed over time for both men and women. Differences between age groups also reflect how fields of study change in response to labour market influences.

While Engineering and related technologies was the most common field of study overall among men, the proportion of men with their highest non-school qualification in this field increased with age – from 31% of men aged 25–34 years to 38% of men aged 55–64 years in 2006. This suggests that the popularity of this field has declined over time and is consistent with the reduction in demand within the labour market for a number of engineering and related professions (including Automotive engineering, and Electric and electronic engineering) over the last decade.²

People with non-school qualifications: proportion by age group for selected fields of study(a) — 2006



(a) For highest non-school qualification.

Source: ABS 2006 Survey of Education and Work.

The next most common fields of study for men were Management and commerce and Architecture and building. The proportion of men with their highest non-school qualifications in these fields was similar across all age groups (ranging from 15–18% and 10–12% respectively). This suggests that the popularity of these fields has not changed greatly over recent decades.

Younger men were more likely than men in older age groups to hold their highest non-school qualification in the field of Information technology. Across all age groups, men aged 25–34 years had the highest proportion (7%) with Information technology as the field of study associated with their highest non-school qualification. These generational differences reflect the relatively recent introduction of information technology into education and industry and the increasing focus on these skills over the last few decades.

Among women, the most common field of study was Management and commerce in 2006. This appeared to be a field of emerging interest, as the proportion of women with their highest non-school qualification in this field was highest for those aged 25–34 years (32%) and then declined with age.

Conversely, the proportion of women whose highest non-school qualifications were in the fields of Health and Education increased with age, corresponding with ageing workforces in the nursing and teaching professions. The proportion of women with qualifications in the field of Education increased from 8% of

Field of study

Fields of study are classified according to the *Australian Standard Classification of Education (ASCED), 2001* (ABS cat. no. 1272.0). The broad fields are:

- ◆ *Natural and physical sciences* includes life and physical sciences and mathematics.
- ◆ *Information technology* comprises studies in computer science and information systems.
- ◆ *Engineering and related technologies* includes studies in fields such as manufacturing, automotive and civil engineering.
- ◆ *Architecture and building* includes studies in architecture, urban environment and building.
- ◆ *Agriculture, environmental and related studies* includes studies in agriculture, horticulture, viticulture, forestry and fisheries.
- ◆ *Health* comprises studies in fields such as medicine, nursing, pharmacy, dental, and veterinary sciences.
- ◆ *Education* includes teacher education, curriculum and education studies.
- ◆ *Management and commerce* includes accounting, business management, sales and marketing, office and finance studies.
- ◆ *Society and culture* includes studies in fields such as political science, human society, behavioural science, law, and economics.
- ◆ *Creative arts* includes performing and visual arts and graphic, design and media studies.
- ◆ *Food, hospitality and personal services* includes studies in fields such as beauty therapy and hairdressing.

those aged 25–34 years to 17% of those aged 55–64 years, while the proportion of women with qualifications in the field of Health increased from 13% of those aged 25–34 years to 17% of those aged 55–64 years.

Labour market outcomes

When considering the benefits of education, one aspect that generates much interest is labour market outcomes. People with non-school qualifications have a much lower chance of being unemployed than people who have completed school level education only. In 2006, the unemployment rate for people aged 25–64 years with a Bachelor degree or higher (2.2%) was less than half that for people whose highest level of education was Year 12 (4.7%) and between two and three times lower than people who had completed Year 11 or below only (5.6%).

Labour shortages over the past decade have meant that unemployment rates have generally declined (from 6.6% in 1996 to 3.8% in 2006 for persons aged 25–64 years). As labour shortages have been particularly apparent in skilled occupations, people who completed school level education only have continued to experience greater levels of unemployment than people with non-school qualifications.

....unemployment by field of study

In 2006, people who held their highest non-school qualifications in the fields of Health, Education and Natural and physical sciences had the lowest rates of unemployment (1.5%, 1.9%, and 1.9% respectively). This indicates a high

Unemployment rate(a) by highest level of education

	1996	2006
	%	%
Bachelor degree or higher	3.5	2.2
Advanced diploma and diploma or below	5.5	3.4
Year 12 or equivalent	7.7	4.7
Year 11 or below(b)	9.0	5.6
Total(c)	6.6	3.8

(a) People aged 25–64 years.

(b) Includes people who are still at school.

(c) Includes people whose qualification level could not be determined.

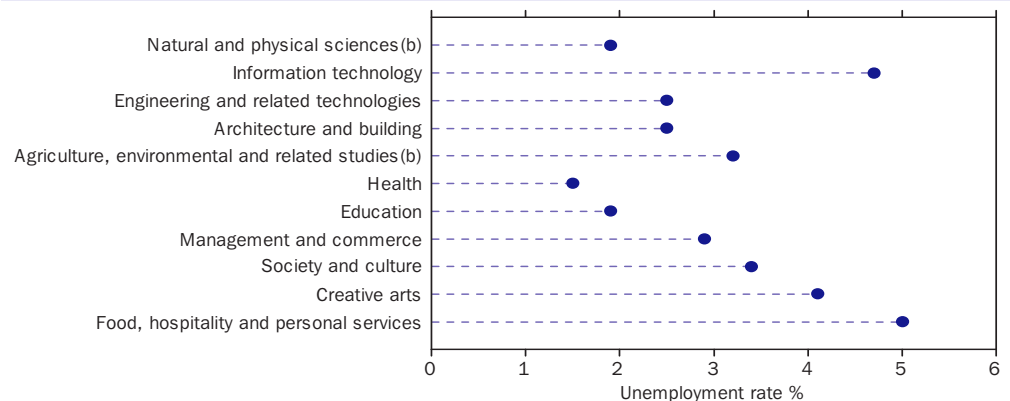
Source: ABS 1996 and 2006 Survey of Education and Work.

demand for these skills within the workforce and for people to work in occupations associated with these qualifications such as teaching and nursing. In comparison, unemployment rates were highest for people with non-school qualifications in Food, hospitality and personal services (5.0%), information technology (4.7%) and Creative arts (4.1%).

State and territory differences

The educational attainment profile of Australians varies according to geographic location. This is due, in part, to differences in the employment opportunities available in each region and the qualifications relevant to those industries. In addition, states and

People(a) with non-school qualifications: unemployment rate by field of study for highest non-school qualification — 2006



(a) Aged 25–64 years.

(b) Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: ABS 2006 Survey of Education and Work.

Proportion of people(a) with non-school qualifications by state and territory — 2006

Type of non-school qualification	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Bachelor degree or higher	25.0	26.4	20.5	19.9	21.1	18.2	23.5	39.0	23.8
Advanced diploma and diploma	9.6	8.5	9.6	8.0	10.0	8.6	6.8	10.6	9.2
Certificate I–IV	26.0	22.1	26.9	26.0	26.4	25.6	30.9	18.8	25.1
Total with non-school qualifications(c)	62.3	58.0	58.2	54.8	58.6	53.5	62.2	69.5	59.4
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Total with non-school qualifications(c)	2 198.2	1 540.1	1 193.1	438.6	617.4	131.0	51.4	122.7	6 292.7

(a) Aged 25–64 years.

(b) Refers to mainly urban areas only.

(c) Includes people whose qualification level could not be determined.

Source: ABS 2006 Survey of Education and Work.

territories have different age profiles which may influence the likelihood of people holding non-school qualifications.

In 2006, the proportion of people aged 25–64 years with a non-school qualification was highest in the Australian Capital Territory (70%), and exceeded the total proportion for Australia (59%) by 11 percentage points. The Australian Capital Territory also had the highest proportion of people with a Bachelor degree or above (39%). This is not surprising given the highly urbanised population of the Australian Capital Territory, and the high proportion of people working in professional industries such as government and education. South Australia (55%) and Tasmania (54%) had the lowest proportions of people with a non-school qualification.

Endnotes

- 1 Preston, A. and Whitehouse G 2004, 'Gender Differences in Occupation of Employment within Australia', *Australian Journal of Labour Economics*, vol. 7, no. 3, pp. 309–327.
- 2 Department of Education Science and Training 2006, *Summary report: Audit of science, engineering and technology skills – July 2006*, DEST, Canberra.

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