

# **Australian Social Trends**

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**Article: Adult literacy** 

AUSTRALIAN BUREAU OF STATISTICS

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## **Adult literacy**

Just over half of Australians aged 15–74 years had adequate or better prose (54%) and document (53%) literacy skills in 2006.

Good literacy is an essential skill for coping with the many demands of life in contemporary Australian society. Tasks ranging from reading the directions on a bottle of medicine, completing a tax return, or accessing information on the Internet, all require a reasonably high level of English literacy. People who are unable to complete such tasks independently are at a considerable disadvantage.

Like many other developed countries, Australia is facing a shortage of skilled labour. While literacy represents only part of an individual's overall skills and abilities, the growing share of skilled and knowledge-based jobs in the economy has increased the importance of good literacy skills among adults in Australia.

#### **Literacy in Australia**

The 2006 Adult Literacy and Life Skills Survey (ALLS) measured literacy competence in four domains: prose literacy, document literacy, numeracy and problem solving. The results were ranked on a scale from level 1 (lowest) to level 5 (highest). Level 3 was considered the minimum level required to meet the increasingly complex demands of a knowledge society.<sup>1</sup>

Almost half of all Australians aged 15–74 years had literacy skills below level 3 (46% had prose literacy skills below level 3 and 47% had document literacy skills below this level) and more than half (53%) had numeracy skills below level 3.

While three-quarters of people surveyed scored below level 3 in at least one domain, just over one-third (36%) were below level 3 in all four domains. One-quarter of people scored level 3 or above in all four domains.

## 

Source: Adult Literacy and Life Skills Survey, Summary Results, 2006 (ABS cat. no. 4228.0).

Level 2

Level 3

Level 4/5

0

#### **Data sources and definitions**

The ABS *Adult Literacy and Life Skills Survey* (ALLS) was conducted from July 2006 to January 2007 and aimed to measure the literacy skills of Australians aged 15–74 years. Four domains of literacy were measured including prose literacy, document literacy, numeracy and problem solving. Health literacy, using information from all four domains, was also derived.

*Prose literacy* is the ability to understand and use information from various kinds of narrative texts, including texts from newspapers, magazines and brochures.

Document literacy measures the knowledge and skills required to locate and use information contained in various formats including job applications, payroll forms, transportation schedules, maps, tables and charts.

*Numeracy* is the knowledge and skills required to effectively manage and respond to the mathematical demands of diverse situations.

*Problem solving* is goal-directed thinking and action in situations for which no routine solution is available.

For each domain, proficiency was measured on a scale ranging from 0 to 500 points and has been grouped into 5 skill levels (except for problem solving, where only 4 levels were defined). Level 1 is the lowest measured level of literacy for each domain.

For more information, see *Adult Literacy and Life Skills Survey, Australia: User Guide* (ABS cat. no. 4228.0.55.002).

A similar survey, the ABS *Survey of Aspects of Literacy*, was conducted in 1996, enabling comparisons of some aspects of literacy (prose and document literacy) between 1996 and 2006.

There have been some small improvements in literacy in the ten years to 2006. According to the survey, there has been a small but significant decline in the proportion of people with prose and document literacy skills at level 1 (three percentage points and two percentage points respectively) between 1996 and 2006. The fall in those at prose literacy level 1 was partially offset by a two percentage point increase for level 2 and level 3 over the 10 years. There was no significant change in the proportion of the population scoring level 2, 3 or 4/5 for document literacy.<sup>2</sup>

Literacy and skill levels						
	Level 1	Level 2	Level 3	Level 4/5	Total	
Skill domains	%	%	%	%	%	
2006						
Prose	16.7	29.7	37.4	16.2	100.0	
Document	18.0	28.8	35.5	17.7	100.0	
Numerical	22.0	30.5	31.3	16.1	100.0	
Problem solving	34.9	35.2	24.5	5.4	100.0	
1996(a)						
Prose	19.7	27.7	35.0	17.6	100.0	
Document	19.6	28.3	35.5	16.5	100.0	

<sup>(</sup>a) Prose and document literacy were the only domains of literacy directly comparable with the 1996 survey.

Source: Adult Literacy and Life Skills Survey, Summary Results, 2006 (cat. no. 4228.0).

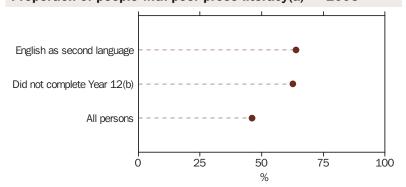
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Most of the improvements in literacy over the period 1996 to 2006 (particularly the decline in the proportion of people with prose literacy level 1) occurred in the age group 50–74 years.

#### Who has poor literacy?

A number of factors, including educational attainment, whether English is a person's first or second language, age and labour force activity are related to literacy skills. People who either did not complete schooling to Year 12 (or equivalent) or spoke English as a second language comprised 83% of those with poor prose literacy skills (level 1 and 2).

#### Proportion of people with poor prose literacy(a) — 2006



- (a) Prose literacy skill levels 1 and 2.
- (b) Excludes people still at school.

Source: ABS 2006 Adult Literacy and Life Skills Survey.

## **Skill levels for prose and document literacy**

Someone with *skill level 1* may have trouble using a bus timetable or completing basic forms. People at this skill level may be able to locate some information on a medicine label, however skill level 1 includes people who could not complete such tasks

At *skill level 2* a person may be able to complete the tasks mentioned above, but may not be able to interpret a weather map or summarise a piece of text.

At *skill level 3* people may not be able to compare and contrast written information, extract information from a pamphlet or interpret pie charts

*Level 3* is regarded by experts as a suitable minimum for 'coping with the increasing demands of the emerging knowledge society and information economy'.<sup>1</sup>

*Skill level 4 and 5* are the highest skill levels. As the numbers of people in these groups are small, they have been combined for the purposes of this article.

#### ...level of school completed

An individual's literacy skills are related to the number of years of schooling completed. In 2006, after excluding those still at school, just over half of Australians aged 15–74 years had not completed school to Year 12 (or equivalent). This group was more than twice as likely to have poor prose literacy skills than were those who had completed Year 12 (63% compared with 29%).

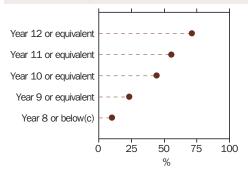
On average, literacy skills increase with each additional year of school completed. For example, 71% of those who had completed school at Year 12 (or equivalent) had adequate or better prose literacy skills compared with 56% of those who only completed Year 11, and 10% of those who finished school at Year 8 or below.

#### ...English as a second language

One factor affecting an individual's English literacy skills is whether their first language was English. Native English speakers are likely to have better English literacy skills than those who first spoke a language other than English. In 2006, one in five Australians aged 15–74 years spoke English as a second language.

Those who first spoke a language other than English were more likely to have poor prose literacy skills (64%) than those whose first language was English (42%).

# Highest level of school completed(a): proportion with adequate or better prose literacy(b) — 2006



- (a) Excludes people still at school.
- (b) Prose literacy skill levels 3, 4 and 5.
- (c) Includes those who never attended school.

Source: ABS 2006 Adult Literacy and Life Skills Survey.

#### Literacy and age

The relationship between age and literacy levels is complex. While skills can be acquired, developed and maintained over the life span, they can also be lost.<sup>1</sup>

Declining levels of literacy skills with increasing age may be associated with the onset of certain health conditions. As time passes, people may experience a decline in cognitive abilities due to ageing effects and declining health. Processing speed and memory can be affected by age-related health problems. For people aged 25 years and over, those who report their health as being good or better tend to have higher levels of literacy skills than those reporting fair or poor health.

Fair or poor health may also prevent people from engaging in ongoing education programs which may help them maintain their literacy skills. A higher proportion (47%) of people reporting good or better health, compared with those reporting fair or poor health (29%), had undertaken a course in the past 12 months.

A number of factors are related to age and literacy, including years of schooling completed and attainment of qualifications, labour force activity, and health status. Literacy skills across the life course are not only related to the capacity and opportunity to develop these skills, but also to the need for a particular level of skill according to an individual's job, family, caring or study activities.

In both 1996 and 2006, the proportion of people with an adequate or higher level of prose literacy was highest among those aged 25–44 years and then declined with increasing age.

The literacy of a population or groups within a population may vary over time according to changes in access to education opportunities. In more recent times, there have been improvements in educational attainment, particularly for younger people. In 2006, 70% of those aged 25–34 years had completed year 12, compared with only 18% of 65–74 year olds. This factor contributed to higher levels of literacy skills in younger age groups compared with older age groups.

The literacy skill levels of the group aged 55 years and over rose between 1996 and 2006. In 2006, 45% of people aged 55–64 years had adequate or better levels of prose literacy compared with 35% in 1996.

Participation in continuing education throughout life is associated with good literacy skills. However, it is also likely that those with better literacy skills are more attracted to participation in adult learning. This is supported by the results of the ALLS survey. In 2006, those with adequate or better prose literacy skills were more likely than those with poor literacy skills to undertake a course (57% compared with 30%).

Although the proportion of people undertaking further study tends to decline with age, those who had undertaken a course of study in the past 12 months, whether the course counted towards a qualification or not, had higher levels of prose literacy skills than those who had not undertaken further study.

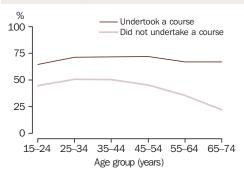
## Proportion with adequate or better prose literacy(a) by age group

	1996	2006
Age group (years)	%	%
15–24	59.1	55.4
25–34	61.3	61.5
35–44	62.0	60.7
45–54	51.2	56.7
55–64	34.5	44.9
65–74	22.6	27.3
Total	52.5	53.6

(a) Literacy skill levels 3, 4 and 5.

Source: ABS Adult Literacy and Life Skills Survey, 2006; ABS Survey of Aspects of Literacy, 1996.

# Whether took a course(a) in the past 12 months: with adequate or better prose literacy(b) — 2006



- (a) Includes study for qualification and non-qualification courses.
- (b) Prose literacy skills 3, 4 and 5.

Source: ABS 2006 Adult Literacy and Life Skills Survey.

The level of literacy of those people who had undertaken study in the past year remained relatively high across all broad age groups with 72% of 35–54 year olds and 67% of 55–74 year olds having adequate or better prose literacy skills.

## **Developing and maintaining literacy** skills

In addition to educational attainment, other life experiences, such as labour force participation and participation in formal and informal learning, may contribute to maintaining or enhancing literacy skills.

#### ...non-school qualifications

Higher levels of educational attainment are associated with higher levels of literacy skills. In 2006, 55% of the adult population aged 15–74 years had a non-school qualification. The vast majority (85%) of people with a Postgraduate degree had adequate or better prose literacy skills compared with 79% of those whose highest qualification was a Bachelor degree, and 49% whose highest qualification was a Certificate.

#### ...adult learning

In 2006, 44% of people aged 15–74 years who were not at school had undertaken a course in the previous 12 months. Around seven in ten people who had undertaken a course in the past 12 months had adequate or better prose literacy skills. In contrast, around four in ten of those who had not undertaken a course had adequate or better literacy skills. Those who undertook a course in the past 12 months had higher literacy skills than those

#### **International comparison**



In 2006, the Adult Literacy and Life Skills Survey was conducted as part of an international survey in seven Organisation for Economic Co-operation and Development (OECD) countries for people aged 16–64 years.

Australia had similar literacy levels to Canada, and scored higher across each of the top three prose literacy levels than Italy and the United States. Compared with Australia, Norway had a lower proportion of the population scoring level 1 for prose literacy, and a higher proportion scoring level 4 or 5.

Different levels of non-response to the survey in different countries may affect the capacity to make comparisons. For example, response rates in different countries ranged from 82% in Bermuda and 81% in Australia, to 40% in Switzerland and 44% in Italy.<sup>2</sup>

## Prose skill level: selected countries and Australia — 2006

	Prose literacy level				
	Level 1	Level 2	Level 3	Level 4/5	
Country	%	%	%	%	
Australia	14.5	29.0	38.8	17.7	
Bermuda	12.5	25.6	35.6	26.3	
Canada	14.6	27.3	38.6	19.5	
Italy	47.0	32.5	17.0	3.5	
Norway	7.9	26.2	45.3	20.6	
Switzerland	15.9	36.3	35.7	12.1	
United States	20.0	32.6	34.6	12.8	

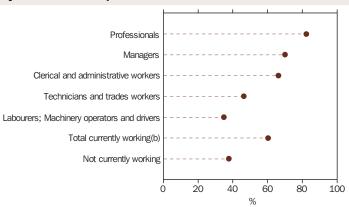
Source: Adult Literacy and Life Skills Survey, Summary Results (ABS cat. no. 4228.0), datacubes, table 5.

who had not, regardless of the educational attainment of individuals in either group.

Other than undertaking courses, there are a variety of other ways in which people learn. Informal learning activities include reading; watching TV; using the Internet in order to learn; attending seminars; visiting museums; and learning by watching and getting advice from others. In 2006, 87% of people aged 15–74 years had participated in some kind of informal learning activity.

Many of the 13% of the population who did not participate in any informal learning activities had fair or poor health or spoke English as a second language.

## Proportion of people with adequate or better prose literacy(a) by selected occupations — 2006



(a) Skill levels 3, 4 and 5 are considered to represent adequate or better prose literacy. (b) Includes other occupations.

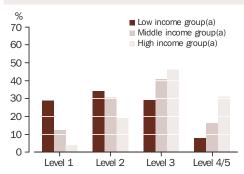
Source: ABS 2006 Literacy and Life Skills Survey.

#### ...work

Changes in the structure of the economy are driving changes in the composition of the labour force. In the decade to 2006 the proportion of those employed who were managers and administrators, or professionals or associate professionals, rose from 35% to 40%, and the proportion working as tradespeople, labourers and related workers fell from 24% to 21%.<sup>3</sup> This reflects a shift towards a knowledge-based economy and an increasing demand for literacy skills.

Poor literacy skills may restrict the types of employment a person can do, or affect whether they are able to find employment. The type of literacy and life skill competencies

## Prose literacy levels: income groups — 2006



(a) The low income group consists of people in the 2nd and 3rd income deciles, when all people are ranked, from lowest to highest income; the middle income group consists of people in the 5th and 6th deciles and the high income group consists of those in the 9th and 10th income deciles.

Source: ABS 2006 Literacy and Life Skills Survey.

required of a person at work also influence literacy skills.

In general, those who are working have higher levels of literacy skills than those not working. Six in ten people who were employed in 2006 had adequate or better prose literacy skills compared with around four in ten of those who were not working.

Of all occupation groups, Professionals had the highest proportion of people with adequate or better prose literacy skills (82%), followed by managers (70%). These proportions were similar to 1996.

#### Income

While literacy represents only part of a person's overall skills and abilities, those with higher levels of literacy tended to have higher income. In 2006, 77% of people with high income had adequate or better prose literacy skills, compared with 57% of those in the middle income group and 37% of those with low income.

#### Conclusion

Literacy skills in the population are strongly linked to educational attainment and labour force participation. Other factors such as type of occupation, whether English was a second language, age, health and participation in formal and informal learning also affect literacy skill levels.

There are a range of organisations and activities in Australia that support and promote adult learning and literacy. Organisations such as the Australian Council for Adult Literacy provide leadership in debate on adult literacy and numeracy policy and practices, while activities such as Adult Learner's week, held annually around Australia, aim to promote adult learning and highlight the range of learning options available.

#### **Endnotes**

- Statistics Canada and Organisation for Economic Co-operation and Development (OECD) 2005, Learning a Living: First Results of the Adult Literacy and Life Skills Survey, OECD, Paris.
- 2 Australian Bureau of Statistics 2007, Adult Literacy and Life Skills Survey, Summary Results, Australia, ABS cat. no. 4228.0, ABS, Canberra.
- 3 Australian Bureau of Statistics 2008, Labour Force, Australia, Detailed, Quarterly, Feb 2008, ABS cat. no. 6291.0.55.003, viewed 21 April, <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/6291.0.55.003">http://www.abs.gov.au/ausstats/abs@.nsf/mf/6291.0.55.003</a>.

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