

DESIRED OUTCOMES

Everybody has the knowledge and skills needed to participate fully in society. Lifelong learning and education are valued and supported.

Knowledge and Skills

INTRODUCTION

Knowledge and skills enhance people's ability to meet their basic needs, widen the range of options open to them in every sphere of life, and enable them to influence the direction their lives take. The skills people possess can also enhance their sense of self-worth, security and belonging.

We live in a society where access to information and proficiency with technology are becoming more important. Being able to function fully in society requires people to have higher levels of knowledge and skills than in the past.

Knowledge and skills include education and training, as well as abilities gained through daily life. The experiences of very young children within their families affect their acquisition and use of knowledge and skills, and influence their capacity to learn. Adults acquire skills through their work and non-work activities – for example, parenting skills or skills relevant to recreation or leisure activities.

Knowledge and skills relate directly to employment decisions and to career choices. Those with relatively few educational qualifications are more likely to be unemployed and, on average, have lower incomes when in work. This affects people's economic standard of living as well as their security and ability to make choices about their lives. Knowledge and skills are important for gaining access to services and for understanding and exercising civil and political rights.

INDICATORS

Five indicators are used in this chapter. Each provides a snapshot of New Zealanders' acquisition of knowledge and skills at a particular stage in their lives, from early childhood to school-leaving age to adulthood. They are: participation in early childhood education, school leavers with higher qualifications, participation in tertiary education, the educational attainment of the adult population and adult literacy skills in English. The focus of the indicators is on formal education and training. This reflects the importance of formal education and training and also the availability of data – there is little data that captures the contribution of informal, on-the-job training to acquiring knowledge and skills.

The indicators are relevant to the current state of knowledge and skills, as well as future trends. Participation in early childhood education contributes significantly to a child's later development. Going to a kindergarten, kōhanga reo or some other early childhood education service prepares children for further learning, helps equip them to cope socially at school and develops their bodies and minds to better prepare them for adult life. Quality early childhood education programmes can help narrow the achievement gap between children from low-income families and children from more advantaged families.⁴⁵

Students who obtain higher qualifications at school tend to have more options for tertiary education and future employment. Those who leave school early have a greater risk of unemployment or low incomes.⁴⁶

Participation in tertiary education opens up career opportunities and improves the skills people need to participate in society. This has become particularly important with the increasing dependence on "knowledge" industries that require well-educated, highly skilled workforces. It also captures aspects of lifelong learning through participation in tertiary education.

Educational attainment of the adult population provides a broad picture of New Zealanders' possession of knowledge and skills. It is influenced by factors not measured in the other indicators, such as adults gaining new qualifications and new migrants arriving with qualifications.

Literacy is a fundamental skill. A good level of literacy in English, including numeracy and the ability to understand documents and tables, is vital in the workplace and in everyday life.

Participation in early childhood education

DEFINITION

The number of enrolments of children aged 3 and 4 years in licensed early childhood education services as a proportion of all 3 and 4 year olds.

Over 90 per cent of the enrolments of children aged 3 and 4 years are in licensed early childhood education services. Licensed services include kindergartens, playcentres, education and care services, te kōhanga reo, home-based services and the Correspondence School. The measure overestimates participation because children enrolled in more than one early childhood education service will be double-counted. The measure is therefore termed the “apparent” participation rate. Information from an alternative measure which avoids double counting – the proportion of Year 1 students who participated in early childhood education – is also included.

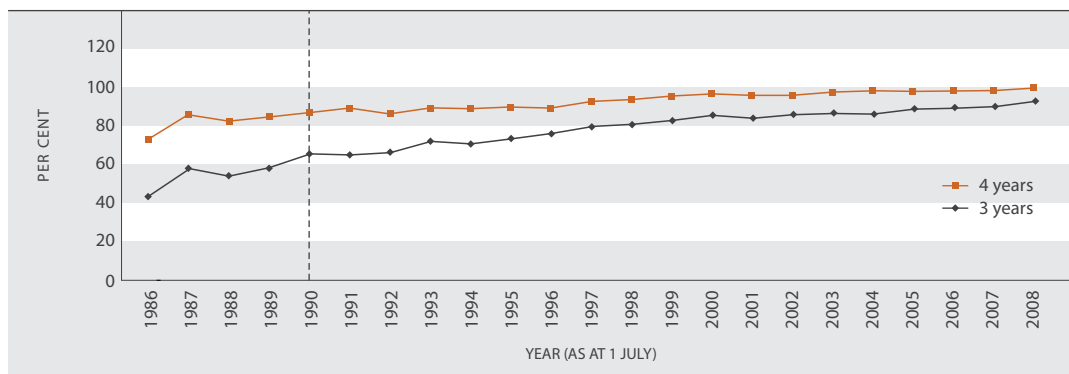
RELEVANCE

Evidence from New Zealand and international research shows that the early childhood years are vital to a child’s development and to their future ability to learn.⁴⁷ Quality early childhood programmes prepare young children socially, physically and academically for entry into primary education and can help narrow the achievement gap between children from low-income families and those from more advantaged families.

CURRENT LEVEL AND TRENDS

As at 1 July 2008, the apparent participation rate in licensed early childhood education services was 93 per cent for 3 year olds and 99 per cent for 4 year olds. These figures represent an increase from 90 per cent and 98 per cent respectively in 2007. Much of the growth in participation in early childhood education occurred in the five years between 1986 and 1991. Between 1997 and 2008, the participation rate increased by 14 percentage points for 3 year olds and by 7 percentage points for 4 year olds.

Figure K1.1 **Early childhood education apparent participation rate, 3 and 4 year olds, 1986–2008**



Sources: Ministry of Education; Ministry of Social Development

Notes: (1) These figures overestimate the true participation rate. Rates in excess of 100 per cent are possible because children can be enrolled in more than one service (2) Includes licensed services only from 1990

SEX DIFFERENCES

Participation in early childhood education varies slightly by sex. In 2008, the apparent participation rate for 3 year old children enrolled in licensed services was 94 per cent for girls and 91 per cent for boys. For 4 year old children, the rates were 100 per cent for girls and 98 per cent for boys.

PARTICIPATION BY TYPE OF EARLY CHILDHOOD EDUCATION SERVICE

In 2008, education and care services (49 per cent) and kindergartens (36 per cent) had the largest number of enrolments of 3 and 4 year olds in early childhood education. Much smaller numbers of children were enrolled in playcentres (5 per cent), home-based services (5 per cent), and ngā kōhanga reo (4 per cent).

PRIOR PARTICIPATION IN EARLY CHILDHOOD EDUCATION

The prior participation rate is an alternative measure that avoids double counting. The percentage of new school entrants who previously participated in early childhood education services has increased over the last eight years, from 91 per cent in July 2000 to 95 per cent in July 2008.

ETHNIC DIFFERENCES

New Zealand European children are the most likely to attend an early childhood education service before entering primary school: 98 per cent, compared with 95 per cent of Asian, 90 per cent of Māori and 85 per cent of Pacific Year 1 students in 2008. From 2000 to 2004, the prior participation rate for both Māori and Pacific new entrants increased faster than the rate for New Zealand European new entrants, narrowing the difference between these groups. However, since 2004, the growth in the rate for Māori has slowed, and there has been little further change in the proportion of Pacific new entrants attending early childhood education services before starting school.

Table K1.1 **Early childhood education attendance (%) by Year 1 students, by ethnic group, as at 1 July 2000–2008**

	European	Māori	Pacific peoples	Asian	Other	Total
2000	95.4	84.8	76.1	89.2	83.0	91.0
2001	96.0	85.3	76.3	89.8	84.1	91.4
2002	96.6	86.5	79.4	92.1	86.6	92.3
2003	97.4	88.4	83.4	92.4	88.9	93.6
2004	97.6	89.3	84.7	94.1	89.4	94.1
2005	97.7	89.9	84.5	95.1	89.9	94.3
2006	98.0	89.9	84.2	96.0	91.7	94.5
2007	98.2	90.6	84.0	96.0	93.6	94.7
2008	98.3	90.4	84.8	95.3	93.8	94.7

Source: Ministry of Education

Note: These figures exclude cases where attendance was unknown

SOCIO-ECONOMIC DIFFERENCES

Year 1 children in low decile schools (those that draw their students from communities with the highest degree of socio-economic disadvantage) are much less likely to have attended an early childhood education service than children in high decile schools. In 2008, only 82 per cent of new entrants in decile 1 schools had previously attended early childhood education services, compared with 97 per cent in decile 6 schools and 99 per cent in decile 10 schools.

REGIONAL DIFFERENCES

In 2008, prior participation in early childhood education was highest in the Canterbury and Otago regions (each 99 per cent), and lowest in Northland (91 per cent), Auckland and Gisborne (both 92 per cent).

School leavers with higher qualifications

DEFINITION

The proportion of secondary school leavers who left school with a qualification at National Certificate of Educational Achievement (NCEA) Level 2 or above.

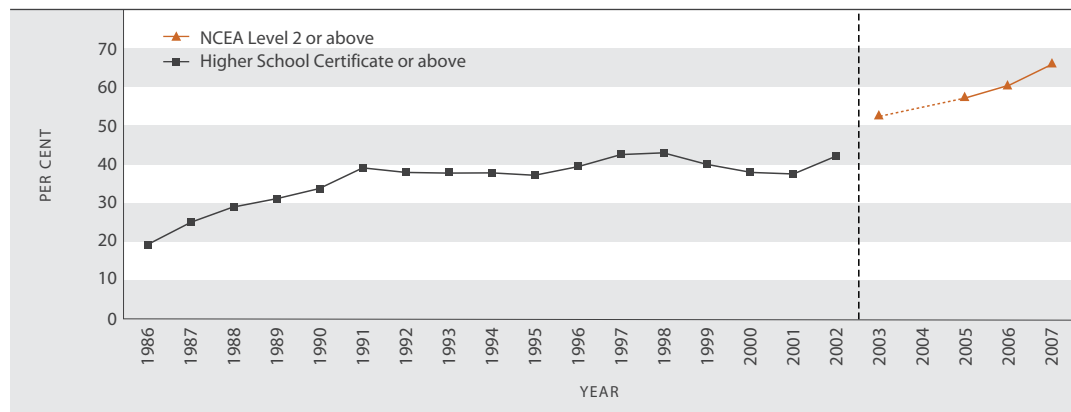
RELEVANCE

Upper secondary school qualifications serve as the foundation for higher (post-secondary) learning and training opportunities as well as the preparation for direct entry into the labour market. Those who leave school early with few qualifications are at a much greater risk of unemployment or vulnerability in the labour force and of having low incomes.⁴⁸

CURRENT LEVEL AND TRENDS

In 2007, 66 per cent of school leavers (37,000 students) left school with a qualification at NCEA Level 2 or above, an increase from the 2006 figure of 60 per cent (34,000 students).⁴⁹ Because of changes in the qualification structure, it is not possible to compare exactly the attainment of upper secondary school students who left school before 2003 with those who left school in 2003 and later. To illustrate the trend in higher school attainment over the long term, Figure K2.1 includes the proportion of school leavers who left with Higher School Certificate and above for the years 1986 to 2002.

Figure K2.1 **Proportion of school leavers with Higher School Certificate or above, 1986–2002 and NCEA Level 2 or above, 2003, 2005–2007**



Source: Ministry of Education

Notes: (1) A direct comparison cannot be made between rates up to and including 2002 with rates for 2003 on, due to the change in the qualification structure (see Appendix 2 for details) (2) Because of methodological changes, 2004 is not comparable with other years and has been omitted

SEX DIFFERENCES Female students are more likely than male students to leave school with an upper secondary school qualification. Between 2006 and 2007, the proportion of school leavers with NCEA Level 2 or above increased for both sexes but there was a slightly larger increase for females than for males. As a result, the sex difference in school attainment widened slightly between 2006 and 2007, from 8.7 percentage points to 9.3 percentage points.

Table K2.1 **Proportion (%) of school leavers with NCEA Level 2 or above, by sex, 2003, 2005–2007**

	Males	Females
2003	47.6	57.9
2005	52.0	62.3
2006	55.8	64.5
2007	60.9	70.2

Source: Ministry of Education

Note: Because of methodological changes, 2004 is not comparable with other years and has been omitted

ETHNIC DIFFERENCES The proportion of school leavers with upper secondary school qualifications varies widely by ethnic group. Asian students who left school in 2007 had the highest proportion with NCEA Level 2 or above, followed by European school leavers, then Pacific and Māori school leavers. Between 2006 and 2007, there was an increase in the proportion of students leaving with a qualification at NCEA Level 2 or above for all ethnic groups. The increase was greater for Māori and Pacific students than for European and Asian students.

Table K2.2 **Proportion (%) of school leavers with NCEA Level 2 or above, by ethnic group, 2003, 2005–2007**

	European	Māori	Pacific peoples	Asian	Other	Total
2003	57.4	28.8	42.3	75.1	54.2	52.6
2005	63.0	32.7	45.3	79.9	55.8	57.1
2006	65.4	36.7	49.6	82.2	63.5	60.2
2007	70.6	43.9	56.0	84.2	67.0	65.5

Source: Ministry of Education

Note: Because of methodological changes, 2004 is not comparable with other years and has been omitted

SOCIO-ECONOMIC DIFFERENCES Young people from schools that draw their students from low socio-economic communities are less likely than other young people to attain higher school qualifications. In 2007, only 49 per cent of school leavers from deciles 1–3 schools (in the most disadvantaged communities) attained qualifications at NCEA Level 2 or above, compared with 62 per cent of those leaving deciles 4–7 schools and 79 per cent of those leaving deciles 8–10 schools.

REGIONAL DIFFERENCES The Otago, Wellington and Auckland regions had the highest proportion (70 per cent) of 2007 school leavers with qualifications at NCEA Level 2 or above, followed by Canterbury (68 per cent). The West Coast had the lowest proportion (45 per cent), followed by Gisborne (55 per cent) and Tasman (57 per cent).

Participation in tertiary education

DEFINITION

The proportion of the population aged 15 years and over enrolled at any time during the year in formal tertiary education leading to a recognised New Zealand qualification.

Tertiary education providers include public institutions (universities, polytechnics, wānanga) and private tertiary education providers receiving government funding or approval and registered with the New Zealand Qualifications Authority. Qualifications range from certificates and diplomas to bachelor and post-graduate degrees. Domestic students only are included. Students who were enrolled at more than one qualification level have been counted in each level.

RELEVANCE

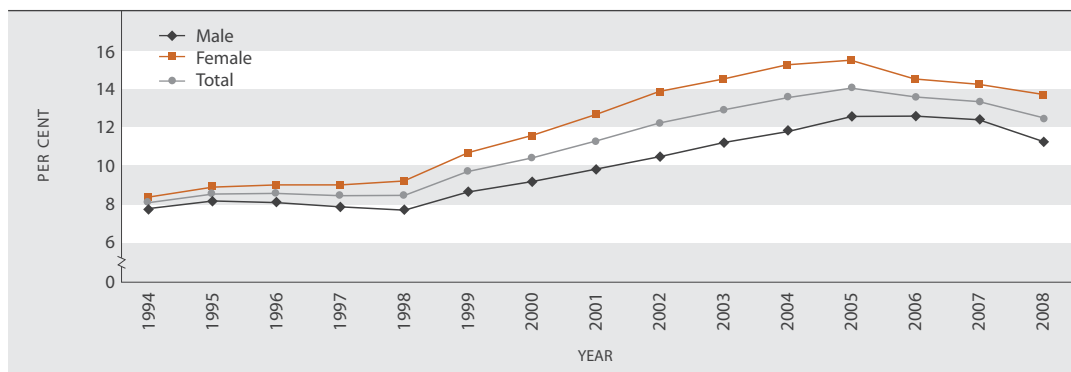
The acquisition of a tertiary qualification provides individuals with additional skills and knowledge to participate in society and in the economy.

CURRENT LEVEL AND TRENDS

During 2008, 421,000 people aged 15 years and over were enrolled in formal tertiary education, a decline from 444,000 people in 2007. The age-standardised tertiary education participation rate was 12.5 per cent in 2008, down from 13.3 per cent in the previous year.

Between 1998 and 2005, there was a rapid increase in tertiary education enrolments: the age-standardised participation rate rose from 8.4 per cent in 1998 to a peak of 14.0 per cent in 2005. Enrolments for certificate-level qualifications have largely driven trends in tertiary participation over the last decade. Participation increased from 2.5 per cent in 1998 to 6.4 per cent in 2005 for Levels 1–3 certificate courses and from 0.5 per cent to 2.2 per cent for Level 4 certificate courses. By 2008, participation at these levels had fallen to 4.9 per cent and 1.9 per cent, respectively. In all other levels of qualification, participation rates remained relatively unchanged between 2005 and 2008. Against the overall fall in participation between 2007 and 2008, the rate of participation in bachelor’s degree courses increased slightly, from 3.4 per cent to 3.5 per cent.

Figure K3.1 Age-standardised tertiary education participation rate, by sex, 1994–2008



Source: Ministry of Education

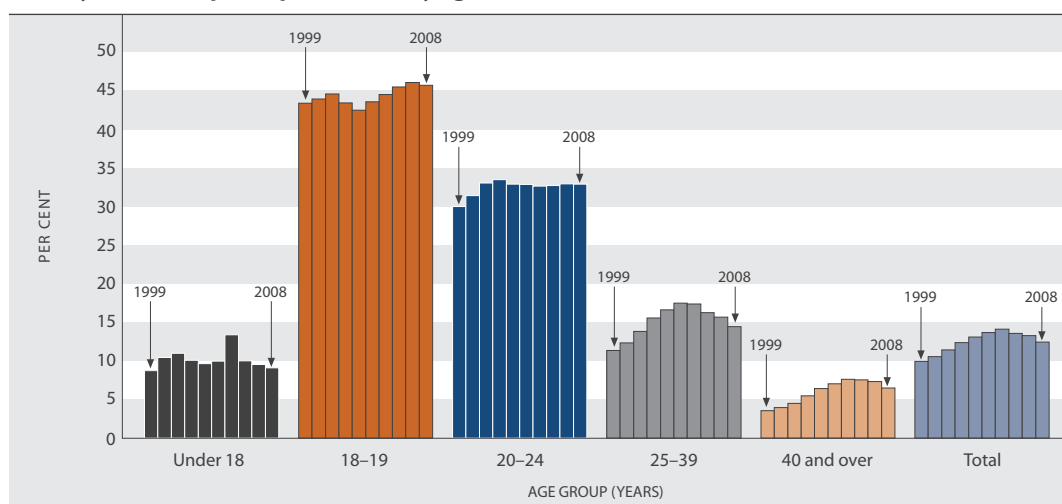
SEX DIFFERENCES

Females are more likely than males to participate in tertiary study: in 2008, the age-standardised participation rate was 13.6 per cent for females and 11.2 per cent for males. The sex difference widened over the decade to 2004, but narrowed somewhat between 2005 and 2008, as females experienced a greater decline in participation than males over that period. In 2008, females were much more likely than males to be studying for bachelor’s degrees (4.2 per cent and 2.7 per cent, respectively) but there was little or no sex difference in enrolments for other qualifications.

AGE DIFFERENCES

Tertiary education participation is highest among 18–19 year olds (45.7 per cent in 2008), followed by 20–24 year olds (32.9 per cent). Between 2005 and 2008, the tertiary participation rate increased slightly for 18–19 year olds, remained steady for 20–24 year olds and declined for all other age groups, particularly for people aged 25–39 years.

Figure K3.2 Tertiary education participation rate, by age, 1999–2008



Source: Ministry of Education

Note: In the under 18 years age group, the figure for 2005 reflects a large number of enrolments in Levels 1–3 certificate courses at institutes of technology or polytechnics in that year

ETHNIC DIFFERENCES

In 2008, the age-standardised tertiary education participation rate was highest for Māori at 16.9 per cent. Participation rates were similar for the Asian ethnic group (12.4 per cent), Pacific peoples (11.8 per cent) and Europeans (11.4 per cent).

The Māori age-standardised tertiary education participation rate climbed rapidly from 7.2 per cent in 1998 to just under 20 per cent between 2003 and 2005. All ethnic groups experienced an increase in tertiary education participation in the first half of the 2000s and a fall in participation between 2005 and 2008, with Māori and Asian ethnic groups experiencing the greatest fall. Almost all of the decline in Māori enrolments between 2005 and 2008 was due to fewer Māori taking certificate-level courses.

In the peak tertiary education age group, 18–19 years, the Asian and European ethnic groups had considerably higher participation rates than Māori and Pacific peoples in 2008. In the 20–24 years age group the differences between the ethnic groups were much smaller. At older ages, Māori tertiary education participation rates were considerably higher than those of other ethnic groups.

Table K3.1 Tertiary education participation rates (%), by age and ethnic group, 2008

Age group	European	Māori	Pacific peoples	Asian	Total
Under 18 years	8.5	12.3	7.6	3.5	9.1
18–19 years	45.6	34.0	37.2	47.2	45.7
20–24 years	33.5	28.1	26.8	29.2	32.9
25–39 years	12.5	21.1	15.3	12.8	14.4
40+ years	5.1	14.3	8.0	8.9	6.5

Source: Ministry of Education

In 2008, the Asian ethnic group had the highest rate of participation in bachelor’s degree courses (4.9 per cent), followed by Europeans (3.3 per cent), Pacific peoples (2.9 per cent) and Māori (2.8 per cent). Māori females (3.6 per cent) and Pacific females (3.8 per cent) were more likely than European males (2.6 per cent) to be enrolled in bachelor’s degree courses.

INTERNATIONAL COMPARISON

There are no robust measures of tertiary education participation across OECD countries. Some indication of New Zealand’s relative standing can be gained from the proportion of people enrolled in education at various ages. In 2006, 29 per cent of 20–29 year olds (the age group that is usually only enrolled in tertiary education) were enrolled in education, placing New Zealand ninth out of 29 countries. This was above the OECD median of 25 per cent. The New Zealand rate was higher than those of the United Kingdom (17 per cent), the United States (23 per cent) and Canada (26 per cent), but below the rate for Australia (33 per cent).⁵⁰ At older ages, New Zealand’s participation in education is much higher than the OECD median (nearly three times higher at ages 30–39 years, eight times higher at age 40 years and over).

Educational attainment of the adult population

DEFINITION

The proportion of adults aged 25–64 years with an educational attainment of (1) at least upper secondary school level, and (2) bachelor’s degree or higher. At least upper secondary school level includes any formal qualification at NCEA Level 1 (or its predecessor, School Certificate) or higher. Bachelor’s degree or higher includes bachelor’s degrees, postgraduate certificates or diplomas, master’s degrees, and doctorates.

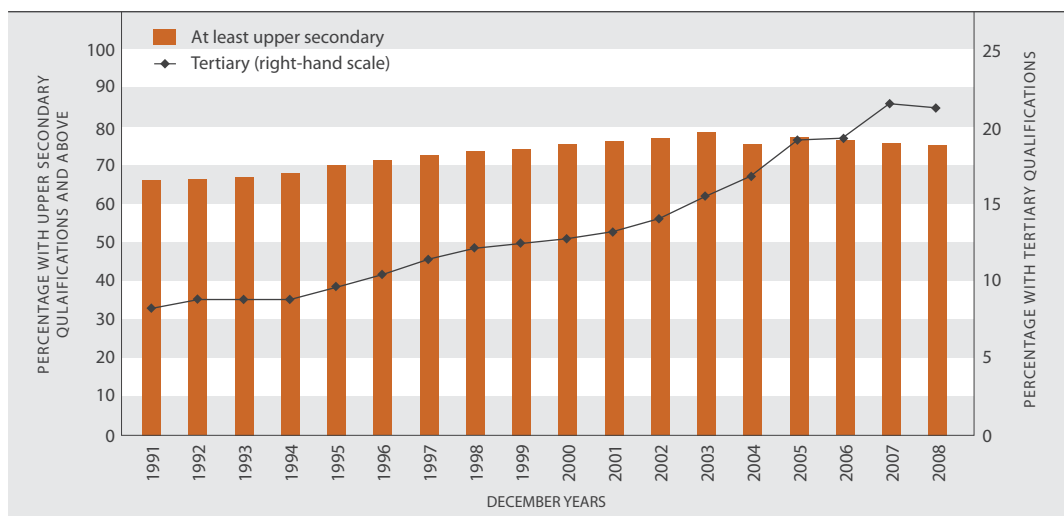
RELEVANCE

The educational attainment of the adult population is an indicator of the skills available in the economy. The level of formal educational qualifications in the population is a commonly used proxy for the stock of “human capital”, ie the skills available in the population and labour force.

CURRENT LEVEL AND TRENDS

In the year ended December 2008, 75 per cent of the population aged 25–64 years (1.66 million people) had attained an educational qualification at upper secondary level or above. This was slightly lower than in 2007 (76 per cent) but a substantial increase from 66 per cent in 1991. Over the same period the proportion of adults with a bachelor’s degree or higher qualification rose from 8 per cent to 21 per cent (469,000 people).

Figure K4.1 **Proportion of adults aged 25–64 years with an educational qualification of at least upper secondary level and tertiary level, 1991–2008**



Source: Statistics New Zealand, Household Labour Force Survey

Note: At least secondary equals NCEA Level 1 (or its predecessor, School Certificate) or higher; tertiary equals bachelor’s degree or higher

AGE AND SEX DIFFERENCES

Younger adults aged 25–34 years are much more likely to have at least upper secondary school qualifications or a bachelor’s degree or higher than adults aged 55–64 years.

Sex differences in educational attainment have narrowed over time. For younger age groups, women are more likely than men to have higher qualifications.

Table K4.1 **Proportion (%) of population aged 25–64 years with higher qualifications, by age and sex, 2008**

	25–34	35–44	45–54	55–64	Total 25–64
At least upper secondary					
Males	78.7	77.4	75.0	71.1	75.8
Females	82.2	76.6	74.6	62.9	74.7
Total	80.5	77.0	74.8	66.9	75.2
Tertiary					
Males	26.6	21.2	19.0	16.8	21.0
Females	31.8	22.4	17.5	12.5	21.4
Total	29.3	21.8	18.2	14.6	21.2

Source: Statistics New Zealand, Household Labour Force Survey, December years

Note: At least secondary equals NCEA Level 1 (or its predecessor, School Certificate) or higher; tertiary equals bachelor's degree or higher

ETHNIC DIFFERENCES

Māori and Pacific adults are much less likely than adults in the European and Other ethnic groups to have higher qualifications. In the year ended December 2008, 64 per cent of Māori and 49 per cent of Pacific adults aged 25–64 years held at least upper secondary school qualifications, compared with 79 per cent of Europeans. Similarly, just 9 per cent of Māori and 7 per cent of Pacific adults held a tertiary qualification at bachelor's degree level or above, compared with 22 per cent of Europeans. However, while the proportion of adults with a tertiary qualification at bachelor's degree level or above doubled in the decade to 2008, it was around two and a half times higher for Māori and Pacific adults. The Other ethnic group (which includes Asians and, from 2007, the category "New Zealander") has consistently had the highest proportion of adults with a tertiary qualification, almost double that of the total adult population in 2008.

Table K4.2 **Proportion (%) of population aged 25–64 years with higher qualifications, by ethnic group, selected years, 1996–2008**

	European	Māori	Pacific peoples	Other	Total
At least upper secondary					
1996	75.2	48.1	45.3	79.3	71.2
2001	78.7	59.3	65.8	85.1	76.2
2007	80.0	62.6	49.9	72.7	75.7
2008	79.5	63.7	49.2	72.5	75.2
Tertiary					
1996	10.8	2.4	1.9	27.4	10.3
2001	13.1	4.8	5.6	31.9	13.1
2007	21.5	9.2	8.4	39.3	21.4
2008	21.6	9.5	7.2	37.4	21.2

Source: Statistics New Zealand, Household Labour Force Survey, December years

Notes: (1) In this data, Other includes Asian ethnic groups and, from 2007, the category "New Zealander" (2) At least secondary equals NCEA Level 1 (or its predecessor, School Certificate) or higher; tertiary equals bachelor's degree or higher

INTERNATIONAL COMPARISON

Because of a revision to the International Standard Classification of Education (ISCED 1997) used by the OECD, qualifications such as New Zealand's NCEA Level 1 and School Certificate are no longer counted as "upper secondary education" attainments. In 2006, 69 per cent of New Zealand adults had at least upper secondary level qualifications, similar to the OECD average of 68 per cent.⁵¹ New Zealand ranked 15th highest out of 29 OECD countries. New Zealand ranked ninth equal (with Japan) out of 30 OECD countries in the proportion of adults who had bachelor's degrees or higher, with a rate of 23 per cent (above the OECD average of 19 per cent). Countries that had higher proportions of adults with qualifications at this level included Norway (31 per cent – the highest rate), the United States (30 per cent), and Canada and Australia (each 24 per cent). New Zealand is among the 24 OECD countries in which females aged 25–34 years are more likely than males of that age to have tertiary qualifications at bachelor's degree level or higher.

Adult literacy skills in English

DEFINITION

The proportion of the population aged 16–65 years with higher literacy skills in English (defined as skills at Level 3 or above), as measured in the 1996 International Adult Literacy Survey (IALS) and the 2006 Adult Literacy and Life Skills Survey (ALL).

Level 3 is a "suitable minimum for coping with the demands of everyday life and work in a complex, advanced society. It denotes roughly the skill level required for successful secondary school completion and college entry".⁵² Prose literacy is defined as the ability to read and understand continuous texts (such as news stories, editorials, brochures and instruction manuals). Document literacy is the ability to read and understand discontinuous texts (such as charts, maps, tables, job applications, payroll forms and timetables). Numeracy is the ability to read and process mathematical and numerical information in diverse situations.⁵³

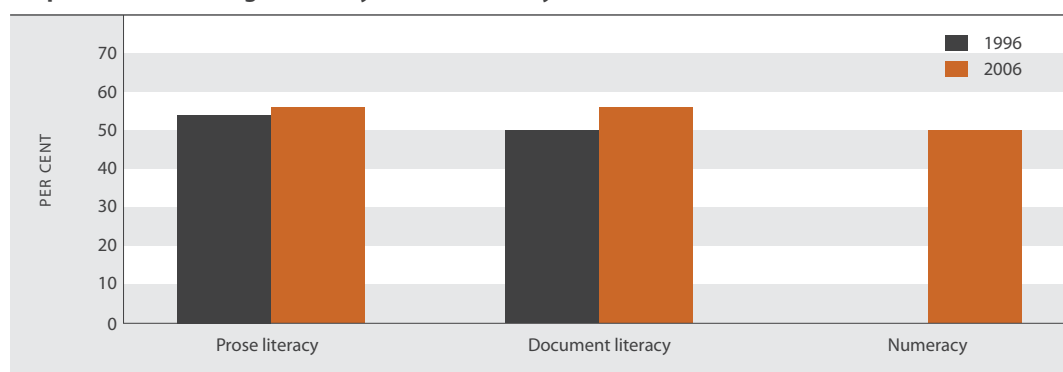
RELEVANCE

The increasing complexity of our society and the need for a more flexible and highly skilled workforce mean individuals need to understand and apply information of varying difficulty from a range of sources to function effectively at work and in everyday life. The IALS and the ALL surveys were designed to measure adult literacy skills in English by assessing proficiency levels, using test materials derived from specific contexts within countries.

CURRENT LEVEL AND TRENDS

Results from the second international literacy survey in 2006 showed 56 per cent of New Zealand's population aged 16–65 years had higher prose literacy skills (at Level 3 or above), 57 per cent had higher document literacy skills and 49 per cent had higher numeracy skills. These proportions represent an improvement since 1996, when 53 per cent of adults had prose literacy skills at Level 3 and above and 49 per cent had document literacy skills at these levels. There is no comparable trend data for numeracy.

Figure K5.1 **Proportion of adults aged 16–65 years with literacy skills at Level 3 or above, 1996 and 2006**



Source: Satherley P, Lawes E and Sok S (2008b)

Note: Numeracy was measured in the 2006 survey only

SEX DIFFERENCES

In 2006, males were more likely than females to have numeracy skills at Level 3 or above, but there was no significant sex difference in higher prose literacy. The picture was mixed for document literacy. Overall, there was no significant sex difference in the proportion of adults with document literacy skills at Level 3 or above. However, among young adults under 25 years, a larger proportion of females than males had these skills. The pattern was reversed at ages 45 years and over, with males more likely than females to have higher document literacy skills.

All of the improvement in higher prose literacy between 1996 and 2006 was due to increases for males (from 49 per cent to 54 per cent). The substantial improvement in document literacy was shared by both sexes: the proportion of adults with skills at Level 3 or above increased from 49 per cent to 56 per cent for females, and from 50 per cent to 58 per cent for males.

Table K5.1 **Proportion (%) of adults with literacy skills at Level 3 or above, by age group and sex, 2006**

Age group	Prose literacy		Document literacy		Numeracy	
	Females	Males	Females	Males	Females	Males
16–24 years	49	44	54	49	40	45
25–34 years	59	56	60	61	49	57
35–44 years	63	56	61	62	52	60
45–54 years	63	61	57	62	45	58
55–65 years	51	52	43	53	34	51
Total	57	54	56	58	45	54

Source: Satherley P and Lawes E (2008a) Figures 4.1, 4.2, 4.3, and customised data

AGE DIFFERENCES

The proportion of adults with literacy and numeracy skills at Level 3 or above was larger at ages 25–54 years than at younger and older ages in 2006. Improvements in higher prose and document literacy between 1996 and 2006 were entirely due to improvements for adults aged 25–65 years. Young adults aged 16–24 years in 2006 were slightly less likely than their counterparts in 1996 to have higher document literacy, and much less likely to have higher prose literacy. However, on an age cohort basis, those who were 25–34 years in 2006 had improved in prose and document literacy relative to 16–24 year olds in 1996.

Table K5.2 **Proportion (%) of adults with literacy skills at Level 3 or above, by age group, 1996 and 2006**

Age group	Prose literacy		Document literacy		Numeracy
	1996	2006	1996	2006	2006
16–24 years	56	47	55	52	43
25–34 years	52	57	52	60	53
35–44 years	59	60	54	61	55
45–54 years	53	62	47	60	51
55–65 years	42	52	31	48	43
Total	53	56	49	57	49

Sources: Satherley P and Lawes E (2008a) Figures 2.2, 2.4 and 2.6; Satherley P, Lawes E and Sok S (2008b)

Note: Numeracy was measured in the 2006 survey only

ETHNIC DIFFERENCES

Across all three domains, a clear majority of New Zealand Europeans had literacy skills at Level 3 or above. Compared to Asian adults in 2006, Māori adults had a larger proportion with prose literacy at Level 3 or above but a smaller proportion with higher levels of document literacy and numeracy. Pacific peoples consistently had the smallest proportions with skills at Level 3 or above. In 2006, less than one quarter of Pacific adults had prose or document literacy skills at this level and only 14 per cent had higher numeracy skills. Between 1996 and 2006, the proportions of New Zealand European, Māori and Asian adults with higher prose and document literacy skills increased, while the proportions of Pacific adults with these skills declined.

Table K5.3 **Proportion (%) of adults with literacy skills at Level 3 or above, by ethnic group, 1996 and 2006**

Ethnic group	Prose literacy		Document literacy		Numeracy
	1996	2006	1996	2006	2006
New Zealand European	59	64	55	64	56
Māori	35	37	30	36	25
Pacific peoples	28	21	26	24	14
Asian	28	34	33	43	39
Total	53	56	49	57	49

Source: Satherley P and Lawes E (2008c)

Note: Robust statistics are not available for Other ethnicities because of small numbers

INTERNATIONAL COMPARISON

Comparable information from the IALS and ALL surveys is available for New Zealand, Australia, the English-speaking part of Canada, and the United States. In 2006, New Zealand had the same proportion of adults with prose and document literacy skills in English at Level 3 or above as Australia (56 per cent), a lower proportion than English-speaking Canada (60 per cent), and a higher proportion than the United States (48 per cent). The proportion of adults with numeracy skills at Level 3 or above was similar for New Zealand (50 per cent), Australia (51 per cent) and Canada (52 per cent), and lower for the United States (42 per cent).⁵⁴