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Education differences between men and women

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Education differences between men and women

Pursuing an education beyond compulsory schooling is becoming increasingly important for employment in Australia. In recent decades there has been strong demand for such qualifications across many sectors of the labour market. Whether further education is gained through an apprenticeship, Vocational Education and Training (VET) or a higher education qualification, post-school education can equip people with the skills and knowledge necessary to engage in a labour market, and provide a solid foundation for life-long learning.

Understanding the differences in non-school qualifications undertaken by Australian men and women is important in determining future careers and work patterns.

This article will consider the non-school qualifications currently being studied by men and women, the level of highest non-school qualification attained overall, and the association of non-school education on labour force participation and starting salaries. Additionally, the article provides an international comparison of higher education rates, literacy levels and numeracy levels.

Vocational education and training

VET programs provide an important pathway between compulsory education and work. Unlike higher education courses, some VET courses, such as certificates I, II and III, have no entry requirements and completion of upper secondary studies is not required.¹

Data sources and definitions

For data relating to apprenticeships, traineeships, higher education, and education and labour force outcomes, this article draws on information from the ABS 2011 Survey of Education and Work.

For data relating to adult literacy and numeracy, this article draws on information from the ABS [Adult Literacy and Life Skills Survey, Summary Results, Australia, 2006](#) (cat. no. 4228.0). In addition to considering document literacy and problem solving, the survey provides information on knowledge and skills in prose *literacy* (the ability to understand and use information from various narrative texts) and *numeracy* (the knowledge and skills required to effectively manage and respond to the mathematical demands of diverse situations), which has been utilised for this article.

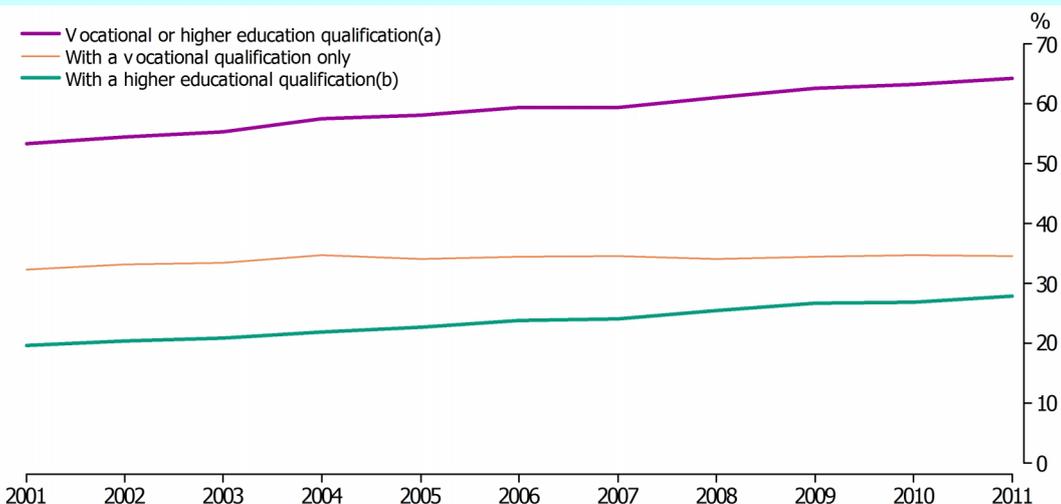
Post-school or non-school qualification refers to a qualification at the postgraduate degree, diploma or certificate level, bachelor degree level, certificate I, II, III, IV level and certificates whose level could not be determined.

An *apprentice* is a person aged 15–64 years who has entered into a legal contract with an employer, to serve a period of training for the purpose of attaining tradesperson status in a recognised trade.

Persons *employed full time* are those who usually worked 35 hours or more per week (in all jobs) and those who, although usually working fewer than 35 hours a week, worked 35 hours or more during the reference week.

Labour force status is a classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force.

Proportion of people aged 25-64 years with a vocational or higher education qualification – 2001-2011



(a) Includes people with a qualification who could not be categorised into either vocational qualification only or higher education qualification.

(b) Some of these people may also have a vocational qualification.

Sources: ABS data available on request, 2002-2011 Survey of Education and Work; 2001 Transition from Education to Work Survey

VET programs also offer training for those re-entering the workforce after extended absences and for those wanting to retrain for a new occupation or upgrade their skills.²

Australian VET programs are delivered through numerous training institutions, including Technical and Further Education (TAFE) institutes, universities, secondary schools, industry organisations, community education providers and private providers.

The VET system is comprised of apprenticeships, traineeships and non-apprenticeship VET, including certificates and diplomas.

Since the 1970s, strategies have been developed and implemented to establish gender balance in the VET system.³ The historical emphasis on male dominated trade training has gradually dissipated, with overall participation in contemporary VET courses now almost even between men and women. However, some differences by field of study remain.

In 2011, 1.9 million students were enrolled in VET programs, more or less evenly split between men (52%) and women (48%).⁴

...field of study

For women, and to a lesser extent men, 'Management and commerce' was a popular field of study in 2011, with nearly a third (29%) of women and 15% of men studying in this field, a ratio of women to men of about 2 to 1.⁴ Examples of courses within the 'Management and commerce' field include a Diploma of Accounting and Certificate IV in Business Administration.

In addition to 'Management and commerce', women were focused on the service sector, with one fifth (19%) studying 'Society and culture' and 13% studying 'Food, hospitality and

personal services'.⁴ Examples within these fields include the Diploma of Children's Services and the Diploma of Hospitality.

For men, the most popular field of study was 'Engineering and related technologies', which almost a third (30%) elected to study.⁴

VET programs are also offered as part of the secondary school certificate. 'VET in School' allows secondary school students to complete a vocational qualification with their school. This can be a useful means of improving a student's success at school by providing a practical approach to learning and can be a stepping stone for students looking to pursue a trade.⁵

In 2010, just over half of the 233,800 students enrolled in VET in School programs were male (52%).⁶ Enrolments in VET courses were highest in government secondary schools (169,500), followed by 38,600 in Catholic schools and 19,500 in independent schools.⁶

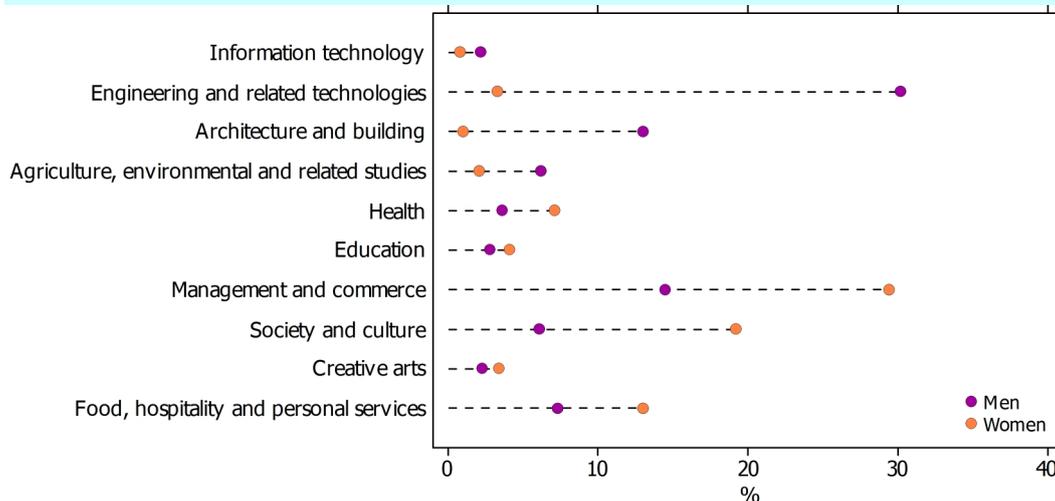
...apprenticeships and traineeships

Historically, the emphasis of apprenticeships on trade and agricultural areas meant that women were underrepresented in the uptake of apprenticeships and traineeships.³

Contemporary apprenticeships and traineeships cover a variety of industries and occupations including hospitality, sales and clerical work. However, men continue to make up a large proportion of all those undertaking apprenticeships and traineeships.

In May 2011, there were 226,500 people aged 15–64 years who were employed as apprentices or trainees as part of the Australian Apprenticeship Scheme. Of these, almost four-fifths (79%) were men.

Proportion in vocational education and training, selected field of study by sex – 2011



Source: National Centre for Vocational Education Research, 2011, [Australian vocational education and training statistics: Students and courses 2011](http://www.ncver.edu.au), <www.ncver.edu.au>.

Proportion of field of apprenticeship/traineeships by sex(a) – 2011



(a) Aged 15-64 years.

Source: ABS 2011 Survey of Education and Work

Apprenticeships and traineeships are largely undertaken by those in younger age groups. Of the 178,200 men aged 15–64 years employed as apprentices or trainees, 40% were aged 15–19 years, and a further 36% were aged 20–24 years. The pattern for women was much the same, with almost a third (30%) of female apprentices or trainees aged 15–19 years, and another third (34%) aged 20–24 years.

For men the most popular apprenticeships and traineeships were in the 'Technicians and trades workers' field, with most men electing to work in this area (89%). Within this field, 34% of all apprentices/trainees were 'Construction trades workers', 23% were 'Automotive and engineering trades workers' and 21% were 'Electrotechnology and telecommunications trades workers'.

The story for women aged 15–64 years was quite different. While a third (31%) were engaged in apprenticeships or traineeships in the 'Technicians and trades workers' field, a quarter (26%) were 'Community and personal service workers' and a quarter (23%) were 'Clerical and administrative workers'.

Higher education study

Higher education refers to education which results in the granting of a Bachelor degree or higher qualification, and contributes to Australia's intellectual, economic, cultural and social development.⁷ In 1970, only three out of every 100 working-age Australians had a higher education qualification. In 2011, this had increased eight fold to 25 out of every 100.⁸

Until 1987, more men than women were students of higher education. Indeed, in the 1950s, only one in five university students were female. There are many reasons for the change in enrolment patterns: the improved social position of women; entry into occupations traditionally dominated by women (teaching

and nursing) now requiring higher education qualifications; and young men having more vocational options than young women.⁸

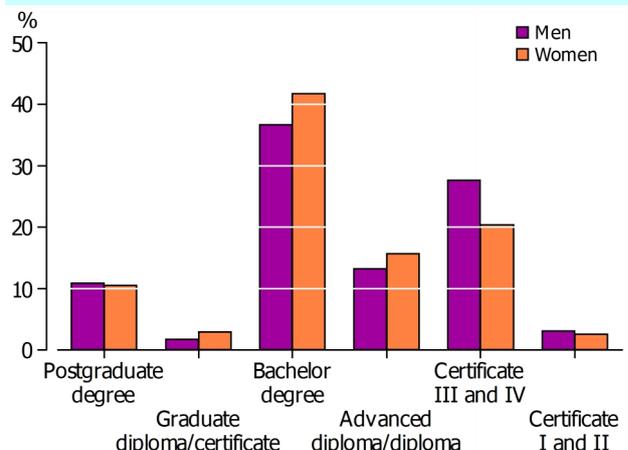
In 2011, there were 1,069,000 higher education students. Of these, 57% were women. Students enrolled in higher education made up half (53%) of all students enrolled in non-school qualifications.

Of all women aged 15–64 years completing a non-school qualification, 42% were enrolled in a bachelor degree, compared with 37% of men. Similar proportions of both men (11%) and women (10%) were enrolled in postgraduate study.

...field of study

As with VET, the most popular field of study for those enrolled in higher education was 'Management and commerce' (25%). Additionally, 'Society and culture' (22%) and Health (14%) were popular choices. The biggest

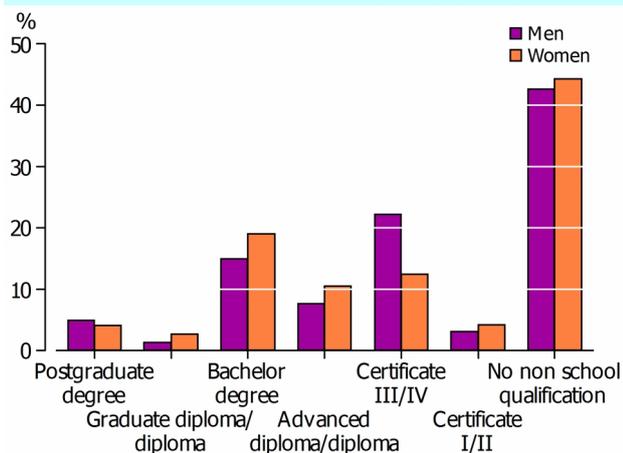
Proportion of level of current non-school qualification being studied(a) – 2011



(a) Aged 15-64 years.

Source: ABS 2011 Survey of Education and Work

Proportion of highest level of non-school qualification(a) – 2011



(a) Aged 15-64 years.

Source: ABS 2011 Survey of Education and Work

differences in the field of study choice between men and women were in the 'Engineering and related technologies field' (13% of men, compared with 2% of women) and the Education field (5% of men, compared with 14% of women).

Highest non-school qualification

In 2011, more than half of men (57%) and women (56%) aged 15–64 years had a non-school qualification.

While the proportion of men and women who had a non-school qualification was quite similar, the type of non-school qualification differed between the sexes. Men were more likely than women to have a certificate III or IV (22% of men, compared with 13% of women), while women were more likely to have a bachelor degree (19% and 15% respectively).

Education and labour force outcomes

There is a relationship between the type and level of a qualification and labour force participation.

In 2011, nine out of ten (93%) men with a higher education qualification were in the labour force; the same proportion as men with a certificate III or IV. By contrast, 77% of men without a non-school qualification were in the labour force.

For women, the association between qualification and labour force participation was more pronounced, with 84% of women with a higher education qualification in the labour force, compared with 62% of women without a non-school qualification. Indeed, women's participation in the labour force increased with the level of non-school qualification attained. Age may be a reason for these differences. More women in younger age groups are studying

toward, or have attained, a qualification than women in older age groups. Furthermore, it would be expected that more young women than older women would be in the labour force, and that more qualified women would join and remain in the workforce than less qualified women.

Additionally, women with a higher education qualification had the highest proportion of full-time employment. Almost two-thirds (62%) of women with a postgraduate degree were employed full time, and just over half (53%) of women with a bachelor degree were employed full time. Women with a certificate I or II, and certificate III or IV had the highest proportions of women employed part time (36% for both), and women with a certificate I or II had the highest proportion of unemployment (6.2%).

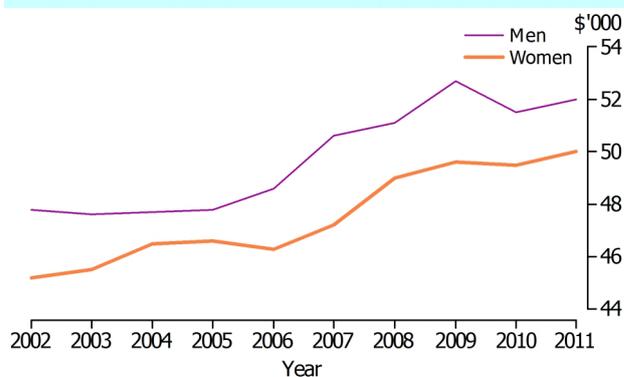
A similar pattern was evident for men, with four fifths (81%) of men with a postgraduate degree, and four fifths (80%) of men with a bachelor degree employed full time, compared with two thirds (62%) of men with a certificate I and II, and three quarters (78%) of men without a non-school qualification. Men with a certificate I and II also had the highest proportion of part-time employment (18%), and the highest proportion of unemployment (8.3%).

..education level and starting salary

For the past 10 years, the median starting salary for women graduates in their first full-time employment has been consistently lower than their male counterparts. In 2011, the starting salary for recent women bachelor degree graduates was 96% of the male graduate salary: \$50,000 compared with \$52,000 respectively.⁹

For postgraduates, median salary is measured instead of starting salary, due to the small proportion of postgraduates entering full-time

Median starting salary of bachelor degree graduates in their first full-time employment(a)(b) – 2002-2011

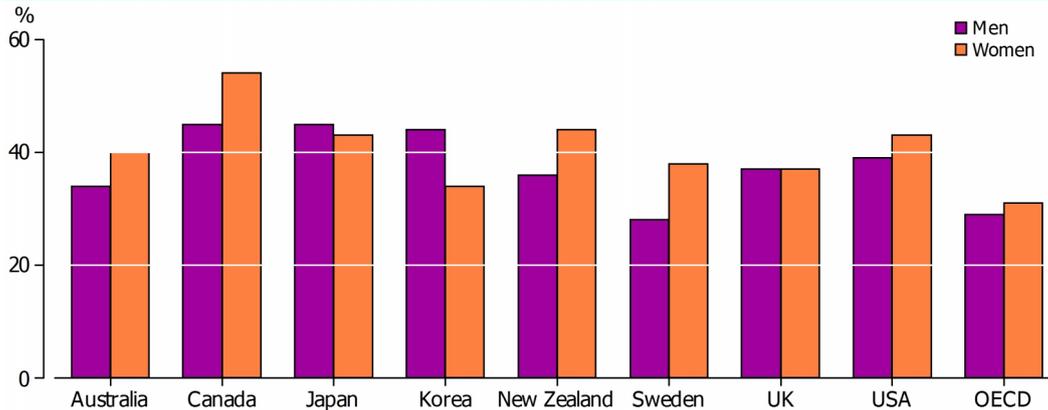


(a) Aged less than 25 years.

(b) In 2010-11 dollars, adjusted using changes in the Consumer Price Index.

Source: ABS *Gender Indicators, Australia, Jul 2012* (cat. no. 4125.0)

Proportion of men and women who have attained a tertiary qualification, selected countries(a) – 2009



(a) Aged 25-64 years.

Source: Organisation for Economic Cooperation and Development, 2011, *Education at a Glance 2011: OECD Indicators*, <www.oecd.org>.

employment for the first time.¹⁰ The salary difference between men and women coursework postgraduates was more pronounced than that of bachelor degree graduates. In 2010, the median full-time salary for female masters by coursework graduates was \$70,000 compared with \$85,000 for male graduates.¹⁰

The difference in starting salaries between men and women can be partly explained by different educational priorities.¹¹ Men tend to graduate in fields more highly ranked according to starting salary, such as engineering, while women tend to graduate in middle ranked fields, such as education.¹¹

International comparisons

Overall, Australia's population has a level of education which is just above the OECD average, with women performing better than men.

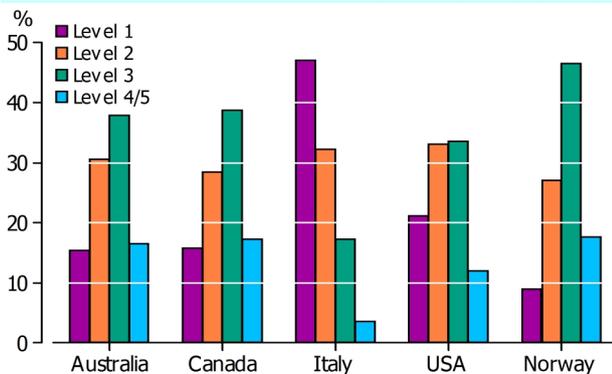
...tertiary qualification attainment

Australia's tertiary education rate is above the OECD average.¹² In 2009, one third (34%) of Australian men and two fifths (40%) of Australian women aged 25–64 years had a tertiary qualification.¹³ This was above the OECD average, with just under a third of men (29%) and women (31%) in OECD countries having a tertiary qualification.¹³

Women were also more likely to have a tertiary education than were men in Canada (54% of women and 45% of men), New Zealand (44% of women and 36% of men) and the United States (43% of women and 39% of men).¹³

However, women were not the majority holders of tertiary qualifications in all OECD countries. In Korea, 44% of men and 34% of women had a tertiary qualification, while in Japan, 45% of men and 43% of women had a tertiary qualification.¹³

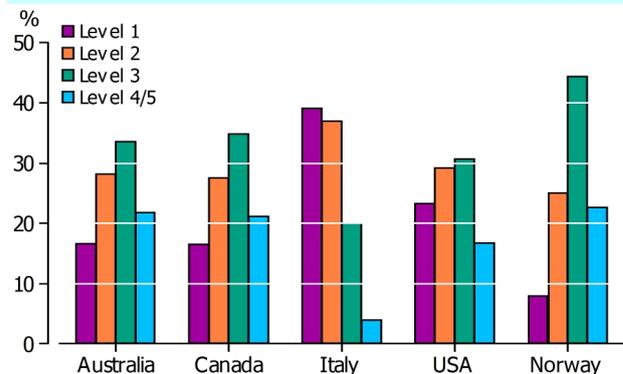
Men's literacy levels, selected countries(a) – 2006



(a) Men aged 16-65 years.

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

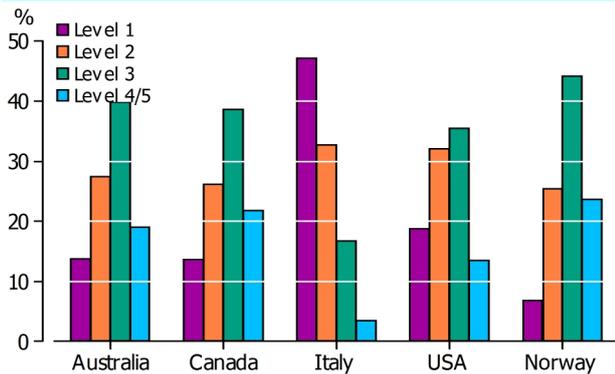
Men's numeracy levels, selected countries(a) – 2006



(a) Men aged 16-65 years.

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

Women's literacy levels, selected countries(a) – 2006



(a) Women aged 16–65 years.

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

...adult literacy

At the most basic level, literacy and numeracy skills build the foundation for schooling and further studies.

In 2006, more than half of Australian men (54%) and women (59%) aged 16–65 years had a prose literacy skill level that placed them at Level 3 or above. Level 3 is regarded as the “minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy.”

Internationally, this compares with 64% of men and 68% of women in Norway, 56% of men and 60% of women in Canada, and 21% of men and 20% of women in Italy who had at least Level 3 prose literacy skills.

At the highest level of the literacy scale, almost one fifth of Australian men (16%) and women (19%) had a prose literacy skill that placed them at Level 4/5.

...adult numeracy

As with literacy, a Level 3 numeracy skill level is considered the minimum required for meeting the complex demands of everyday life. In 2006, similar proportions of Australian men (55%) and women (45%) had Level 3 or above numeracy skills.

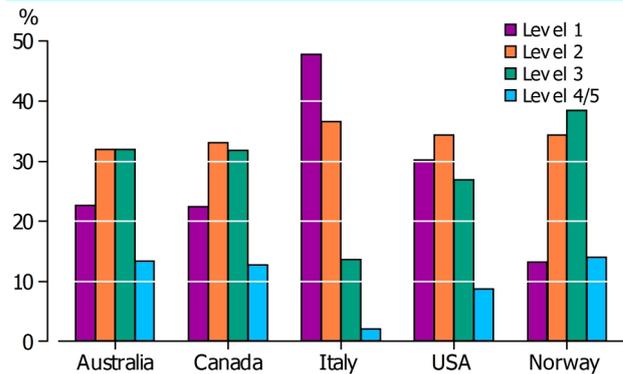
This compares with 67% of men and 53% of women in Norway, 56% of men and 45% of women in Canada, and 24% of men and 16% of women in Italy who had a numeracy skill level that placed them at least at Level 3.

With regard to the highest level of numeracy skill, one fifth (22%) of Australian men had a numeracy skill level that placed them at Level 4/5, compared with 13% of Australian women.

Looking ahead

The qualifications attained following compulsory secondary school education

Women's numeracy levels, selected countries(a) – 2006



(a) Women aged 16–65 years.

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

provide young people with the training and pathways that are often needed to achieve career goals.

While there are still some gender differences in the types of non-school qualifications pursued by men and women, the increasing number of women who undertake further learning has had many benefits for both women and the Australian labour market.

Endnotes

- 1 The Good Universities Guide, 2012, *Getting into VET courses*, viewed 19 Sep 2012, <www.gooduniguide.com.au>.
- 2 National Centre for Vocational Education and Research, 2009, *An overview of vocational education and training in Australia and its links to the labour market*, <www.ncver.edu.au>.
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- 11 Graduate Careers Australia, 2012, *GradStats 2011*, <www.graduatecareers.com.au>.
- 12 Tertiary education refers to VET and higher education.
- 13 Organisation for Economic Cooperation and Development, 2011, *Education at a Glance 2011: OECD Indicators*, <www.oecd.org>.

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