

Chapter three

Education and learning

The NSW Government is committed to ensuring NSW has a highly skilled workforce that meets the current and future needs of the NSW economy.

Photo: Bianca Heys, student from the Forest High School



Education and learning

If women are to enjoy the full range of employment and life opportunities it is critical that they participate fully in all facets of education and learning.

Tracking progress in educational participation and attainment is an important goal in this Report. Of particular importance is examining trends among low socio-economic groups; data presented this year underscores the need for vigilance on this point.

The chapter outlines progress for both females and males in education at all levels. They include school completion, subject choice at HSC, vocational education and training participation and outcomes, and higher education performance.

The chapter also includes post-education indicators of early career earnings and job outcomes. These data should be read in conjunction with more comprehensive analysis of women's workforce experiences in Chapter Four.

The higher the educational attainment, the greater the choices available to the girls and women of NSW.

Key findings

NSW women and girls have made substantial progress in educational attainment and achievement in the last few decades. The percentage of women with qualifications at Certificate III and above has increased by 20 percentage points since 2003, from 39 to 59 percent in 2012. This is a faster rate of growth than among men, and today, NSW women have fewer formal qualifications than men only in the 45 and older age groups.

In 2011, for the first time in the last 10 years, boys had higher Year 12 completion rates than girls. Girls' Year 12 completion rates were 71 percent compared to 73 percent for boys. Boys made up considerable ground in the last year: in the period 2002-10, the gap in favour of girls was considerably larger, with around 72 percent of girls completing Year 12 compared to 62 percent of boys.

While the educational outcomes of girls and women are positive overall, the increased participation of girls in education is not uniform across the disciplines. Participation in trades training remains low by comparison with boys and men and is largely unchanged over 30 years. Women made up just 17 percent of technical and trade apprentice and trainee commencements in the 12 months to September 2012, and 28 percent were in hairdressing apprenticeships.

Just 31 percent of girls' HSC course completions are in science, technology, engineering and mathematics subjects compared to 45 percent of course completions by boys. A similar gender difference is evident in women and men's course enrolments at university; engineering and related technologies made up 12 percent of men's undergraduate enrolments but just 1.4 percent of women's.

Many women lose economically in the course of making transitions between study, work and family. In 2012, a graduate pay gap of \$5,000 per year (an increase of \$1,000 from the previous year), had emerged between young women and men by the time they obtained their first full-time job after university. Female vocational education and training graduates are less likely than men to work in a field for which they are qualified.



NSW 2021

A PLAN TO MAKE NSW NUMBER ONE

State Plan NSW 2021

Goal 1: Improve the performance of the NSW economy

State Plan NSW 2021

Goal 6: Strengthen the NSW skill base

State Plan NSW 2021

Goal 15: Improve education and learning outcomes for all students

The NSW Government is committed to ensuring NSW has a highly skilled workforce that meets the current and future needs of the NSW economy. The State Plan also aims to provide for an education and training system that offers all members of the community access to high quality training so they can fully participate in the workforce. Increasing the number of women in non-traditional occupations is part of this vision. The topics covered in this chapter relate to State Plan Goals 1, 6 and 15; the linkages between individual indicators and State Plan targets are shown below.

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Gender indicators: Education and learning

In this report, women's experiences in education and learning are reported in six areas of importance

for women as they move through their lives and careers. Many indicators align with state, national and international frameworks and these linkages are shown in the topics and indicators box below.

Education and learning topics and indicators

Topic	Indicators	Linkages
Topic 1: High school completion Focus topic	1.1 Completion rates, Year 12 or equivalent 1.2 Higher School Certificate student course choice Education and employment experiences of early school leavers	ABS Gender Indicators Productivity Commission, Report on Government Services State Plan NSW 2021 (Goals 1 and 15) United Nations Gender Inequality Index
Topic 2: Vocational education and training	2.1 Vocational education and training participation 2.2 Qualifications at AQF Certificate III and above	ABS Gender Indicators Council of Australian Governments, National Agreement for Skills and Workforce Development State Plan NSW 2012 (Goal 6) Productivity Commission, Report on Government Services
Topic 3: Apprenticeships and traineeships	3.1 Apprenticeships and traineeships 3.2 Women's participation in technical and trade training	ABS Gender Indicators State Plan NSW 2012 (Goals 1 and 6)
Topic 4: Higher education	4.1 Undergraduate students 4.2 Postgraduate students 4.3 Undergraduate field of education	ABS Gender Indicators State Plan NSW 2012 (Goal 6) Organisation for Economic Co-operation and Development (OECD) Gender Equality Indicators World Economic Forum Global Gender Gap Index United Nations Gender Inequality Index
Topic 5: Employment outcomes	5.1 VET graduates working in their field of study 5.2 The graduate salary gap	ABS Gender Indicators State Plan NSW 2012 (Goal 6)
Topic 6: Lifelong learning	6.1 Work-related learning	ABS Gender Indicators State Plan NSW 2012 (Goal 6)

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Current levels and trends

The rest of the chapter describes the current status of NSW women in the topic areas listed above and the direction of change over time, where time series information is available. The latest available data is used in each case; the year in

which data is collected as well as details about the source is shown for each indicator.

For some indicators the data for population subgroups used in the 2012 *Women in NSW* Report is not available. This is the case for the remoteness classification (ARIA) used to show rural/urban

differences. As a result, comparisons with other subgroups have been given. In the case of the indicator on participation in adult and community education, no new data is available since the publication of *Women in NSW 2012*. Last year's data is shown below and is not repeated in the body of this year's Report.

Indicator	Women in NSW 2012	Source
Participation in adult and community education	Women make up 67% of enrolments in government-funded adult and community education courses in NSW.	Adult and Community Education Statistics. Department of Education and Communities, unpublished data.

Topic 1 High school completion

Completing high school creates the platform from which to embark on further education and employment. It is a measure of achievement in itself: earnings and employment outcomes are significantly better

for people who have completed Year 12 or its equivalent. Indicator 1.1 reports on Year 12 completion while Indicator 1.2 focuses on subject choice in the Higher School Certificate (HSC).

The section ends with a Focus Topic that examines the further

education and employment experiences of girls who leave school early and do not complete Year 12. This group is the focus of specific attention in *NSW 2021, the State Plan* and is critical to redressing social disadvantage.

1.1 Completion rates, Year 12

The proportion of the estimated potential Year 12 student population who achieve a NSW HSC Award.

Current position	<p>In 2011, 71 percent of girls in NSW completed Year 12, compared with 73 percent of boys.</p> <p>Gender gap</p> <ul style="list-style-type: none">Girls have lower school completion rates than boys by 2 percentage points.
The direction of change over time	<p>Completion rates for both sexes remained constant between 2002 and 2010. In 2011, girls' completion rates changed little from 72 percent in 2010, whereas boys' increased significantly from 63 to 73.</p> <p>Between 2002 and 2010 the gender gap remained steady with an average 10 percentage point gap in favour of girls. In 2011, for the first time in the past decade, boys surpassed girls with a 2 percentage point lead. This contrasts with the rest of Australia where girls are still ahead of boys by 7 percentage points (73 percent of girls compared to 66 percent of boys complete Year 12).</p>

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Discussion	<p>School completion rates in the years leading up to 2011 have been higher for female than male students in all socio-economic groups (see Figure 3.1).</p> <p>The new 2011 gender gap, with boys completing more than girls, is most notable in the lower socio-economic deciles but can also be seen in the medium socio-economic deciles. In the three lowest socio-economic deciles 70 percent of boys completed Year 12 or equivalent compared to 66 percent of girls, whose completion rates fell slightly.</p> <p>One possible explanation relates to the drop in young men commencing an apprenticeship or traineeship. In 2009 (two years earlier), there was a sharp decrease (14 percent) in the number of young men (15 to 24-year-olds) commencing an apprenticeship or traineeship.¹ This decrease was greatest amongst 15 and 16-year-old boys and the commencement rate for these two groups has not recovered. 15 and 16-year-old boys are the ones who commenced senior high school in 2009 and would have made up the bulk of those who completed Year 12 in 2011.</p> <p>Another possible factor is changes to rules about leaving school. From 2010 all students in NSW have been required to complete Year 10. After Year 10 and until they turn 17, students must be: in school, registered for home schooling, in approved education or training, in full-time paid employment or a combination of work, education and/or training.</p>
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Completion rates are estimated by calculating the number of students who meet the requirements of a Year 12 certificate expressed as a percentage of the potential year 12 population. The potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 divided by five.

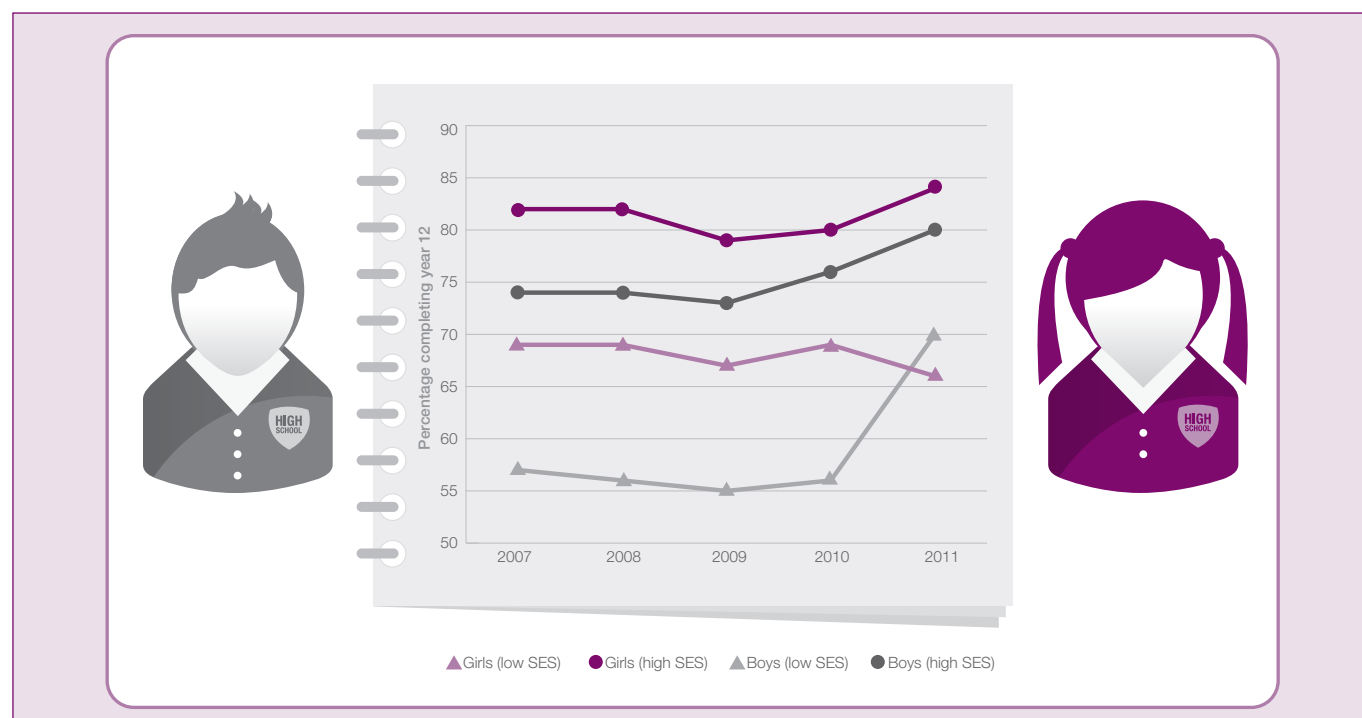
Note that this indicator needs to be considered alongside Indicator 3.1, which shows that more boys than girls enter vocational education and training.

Year collected: 2011 and previous years.
Data source: Steering Committee for the Review of Government Service Provision (2013), *Report on Government Services 2013*, Productivity Commission (Australian Government).
More information is available at www.pc.gov.au

¹ Early 2009 was the peak of the Global Financial Crisis and was marked by high unemployment rates, making it more difficult to obtain an apprenticeship or traineeship.

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Figure 3.1 Completion rates to Year 12 by socio-economic status, NSW, 2007-11



Note: Low socio-economic status (SES) is defined here as the average of the three lowest deciles and high socio-economic status is the average of the three highest deciles. The ABS Postal Area Index of Relative Socioeconomic Disadvantage has been used to calculate SES on the basis of student home addresses.

Population: The estimated potential population of NSW students.

Source: Steering Committee for the Review of Government Service Provision (2013), *Report on Government Services 2013*, Productivity Commission (Australian Government).

1.2 Higher School Certificate student course choice

HSC course completions in science, technology, engineering and mathematics (STEM) subjects

Current position	<p>In 2012, 31 percent of course completions by girls at HSC level were in the Key Learning Areas (KLAs) of science, technology, engineering and mathematics. This compares to 45 percent of course completions by boys.</p> <p>Gender gap</p> <ul style="list-style-type: none"> Girls are 14 percentage points less likely than boys to complete STEM courses at HSC level.
The direction of change over time	<p>Between 2006 and 2012 there was little change in girls' or boys' completion of STEM courses.</p> <p>In data for 2011 provided in last year's Report, 32 percent of girls' course completions were in the STEM KLAs compared to 45 percent of boys'.</p>

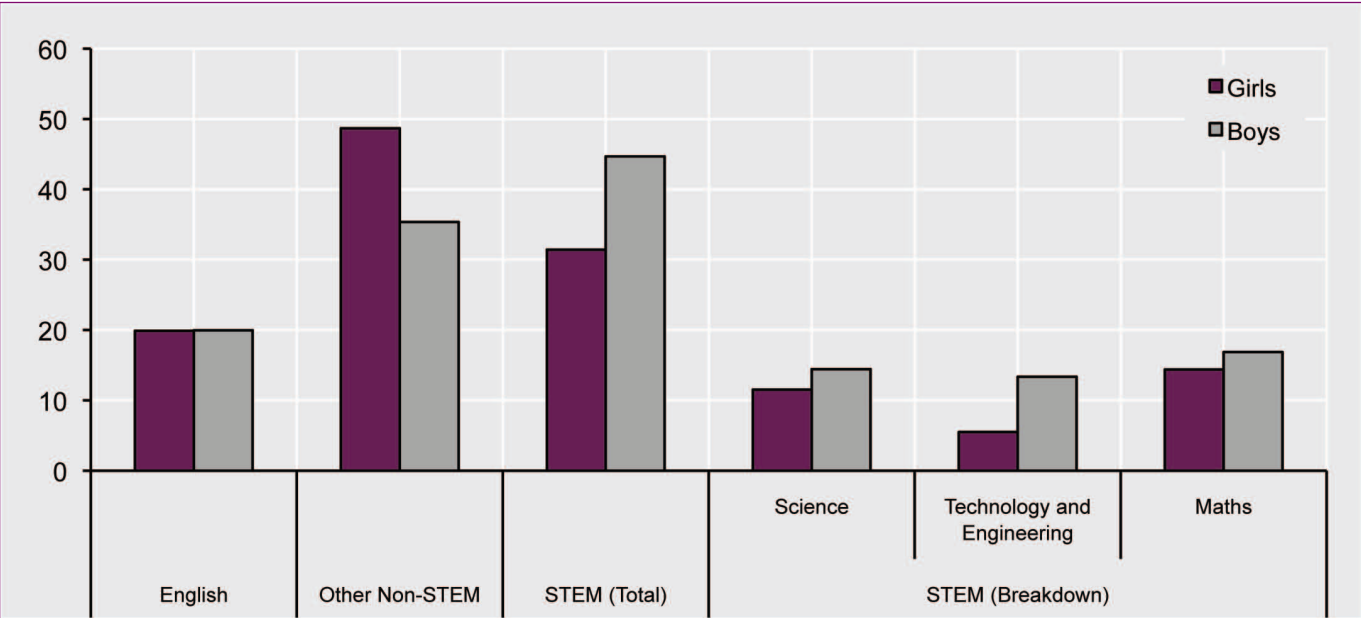
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Discussion	<p>Girls' under-representation in STEM courses contrasts with their strong performance in other subjects (see Table 3.1 and Figure 3.2).</p> <p>While there is no national data on this topic, recent research in South Australia indicates a similar pattern to NSW. In South Australia, 46 percent of total STEM students are girls compared with 43 percent in NSW.¹</p> <p>Knowledge-intensive, high value-add industries will continue to fuel the prosperity of developed economies like Australia's.</p> <p>Women's further study and career options may be constrained by their course choice at high school. STEM courses are assumed knowledge and/or prerequisites for many tertiary level courses that have good job prospects (see Indicator 5.2, The graduate salary gap).</p> <p>Further research could establish the extent to which girls and boys have different completion rates across STEM subjects, as opposed to different enrolment preferences.</p>
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There were 23 separate HSC courses within the STEM KLAs in NSW in 2012 (see Table 3.1). Note that this year we have included VET subjects and revised last year's data accordingly. The data captures students who completed courses; enrolment data is not readily available.

Year collected: 2012.
Data source: NSW Board of Studies, unpublished data.
More information is available at www.boardofstudies.nsw.gov.au

Figure 3.2 Girls' and boys' completion of STEM courses at HSC level, NSW, 2012



Note: STEM courses are listed in Table 3.1. Non-STEM courses are all other HSC courses. English is shown separately because it is compulsory and accounts for 20 percent of all completions.
Population: NSW Higher School Certificate students.
Source: NSW Board of Studies, unpublished data.

¹ Government of South Australia (no pub date) Female participation in STEM study and work in SA 2012. Note that SA includes a slightly different range of subjects in the STEM total than NSW.
South Australian Department of Further Education, Employment, Science and Technology, Female Participation in STEM Study and Work in South Australia 2012.

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Table 3.1 Science, technology, engineering and mathematics HSC completions, NSW, 2012

HSC Key Learning Area	Share of girls' course completions %	Share of boys' course completions %
Science (44,059)	11.5	14.4
Biology (16,570)	5.8	3.9
Chemistry (10,838)	2.8	3.6
Earth and environment (1,497)	0.4	0.5
Physics (9,469)	1.2	4.5
Senior science (5,685)	1.4	1.9
Technology and engineering (31,655)	5.5	13.4
Automotive (741)	0.0	0.4
Construction (3,142)	0.0	1.9
Electrotechnology (405)	0.0	0.2
Metal and engineering (1,422)	0.0	0.8
Primary industries (962)	0.2	0.3
Agriculture (1,403)	0.4	0.4
Design and technology (3,241)	0.8	1.1
Engineering studies (2,051)	0.1	1.2
Food technology (3,782)	1.6	0.6
Industrial technology (5,200)	0.3	2.8
Information processing and technology (3,285)	0.4	1.6
Information technology (1,746)	0.2	0.9
Software design and development (1,471)	0.1	0.8
Technology and applied study (400)	0.1	0.1
Textiles and design (2,404)	1.3	0.0
Mathematics (53,070)	14.4	16.9
Total STEM courses (128,784)	31.4	44.7
Other Non-STEM (143,812)	48.7	35.4
English (67,864)	19.9	20.0
Total course completions (340,460)	11.5	14.4

Note: The figures are for STEM course completions as a percentage of total course completions for HSC units of study. This year VET subjects are included. There were 72,500 students in NSW in 2012 who undertook 340,000 courses. English is shown separately because it is the largest and only compulsory subject.

Population: NSW Higher School Certificate students.

Source: NSW Board of Studies, unpublished data.

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Focus topic Education and employment experiences of early school leavers

What happens to young women who leave school early? Although much is written about the challenges they face in employment and lifetime earnings, less is known about the extent to which they overcome their initial 'qualifications gap' in later life. In this focus topic we compare young women who left school early during the 1990s with those who completed Year 12 in the same period, looking at whether they returned to education and how this affected them.

Today the percentage of young people completing Year 12 has increased compared to 15 years ago. Raising the school leaving age, offering a wider range of vocational subjects at school and the changing labour market have all contributed to this trend. While 78 percent of Australian women aged 20 to 24 years had completed Year 12 or equivalent in 2001, 85 percent had in 2011.¹

¹ Foundation for Young Australians (2012) *How Young People are Faring 2012* p.56. Available at www.fys.org.au. The figure is for Australia as a whole.

Nevertheless, tracking the employment and educational outcomes for an earlier generation provides useful insights into the challenges and opportunities available to a group that commence their adult life with qualification deficits. In this focus topic we track young women using the HILDA longitudinal survey.² We look at school leavers first in 2001, when they were aged between 22 and 29, and then again 10 years later.³ First, contextual information about the two groups is provided.

² This report uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either FaHCSIA or the Melbourne Institute. All HILDA data in this report has been analysed for Women NSW by Dr Ian Watson.

³ The choice of population reflects women in their twenties who will have (largely) finished their tertiary studies following their school years.

Socio-economic background of girls completing and not completing school

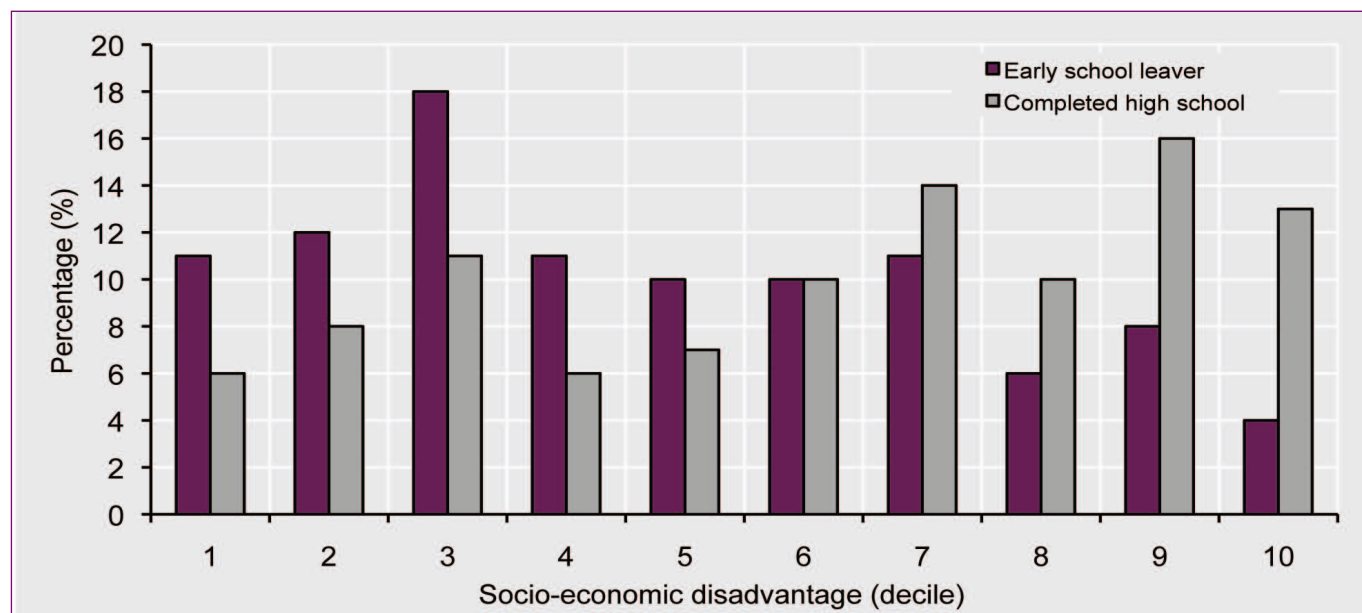
An examination of the social background of girls leaving school early indicates they come disproportionately from disadvantaged circumstances.

The early school leavers were overwhelmingly found living in areas defined as being in the lowest deciles of socio-economic disadvantage, with some 48 percent found in the bottom three deciles.⁴ Among those who completed high school the proportion who were living in these three areas was just 29 per cent. By contrast, the school completers were found clustered in the most advantaged areas, with 37 percent in the top three deciles. Among the early school leavers, only 13 percent lived in these areas (see Figure 3.3).

⁴ The analysis uses the ABS SEIFA Index to examine socio-economic status.

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Figure 3.3 Socio-economic area of residence in 2011



Population: All NSW women in the HILDA survey aged 22 to 29 (inclusive) in 2011. Data is weighted.
Source: HILDA Release 11.0.

What other background differences existed in 2001?

Schools

The kind of school attended was notable: 84 percent of early school leavers had been to government schools, compared with 66 percent among those who had completed high school.

Occupation

Parents' occupations also correlated with high school completion. Early school leavers were more likely to have fathers who worked at machinery and plant operators, or as labourers (35 percent). The proportion who had worked as professionals was just 10 percent. By contrast, women who had completed high school were much more likely to have had fathers who were professionals (22 percent) and much less likely to have been machinery and plant operators, or labourers (13 percent). The same patterns were evident in

the occupation of the mothers.

Cultural differences also appear to differ systematically between the two groups of women. Only 17 percent of the early school leavers had been born overseas whereas some 27 percent of the women who completed high school had been. The contrast between the two groups was also stark when it came to their parents' birthplaces. Among the early school leavers, for example, some 36 percent had fathers born overseas, but among the school completers the proportion was higher, at 42 percent. The same pattern was evident with the mothers.

Early school leavers who were in their twenties in 2001

Turning to the experiences of the young women in education and the labour market, the first point of interest is the educational outcomes which had already

occurred by 2001. For some of the women in the sample, leaving school may have taken place over 10 years earlier.

As one might expect, nearly half of the women who had completed high school had gone on to achieve a university education, while another 11 percent had acquired diplomas or advanced diplomas.

Among the early school leavers, the situation was very different: just 1 percent had achieved a university education and another 7 percent had acquired diplomas. They had, however, taken up vocational courses in considerable numbers, with 20 percent holding certificate level qualifications.

Overall, some 72 percent of the early school leavers had acquired no further qualifications, compared with just 35 percent of those who completed high school. See Table 3.2.

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Table 3.2 Educational outcomes in their twenties, NSW women by Year 12 completion

Highest level of education achieved	Whether completed Year 12 or not by 2001	
	Women who were early school leavers %	Women who completed Year 12 %
University	1	45
Diploma/Advanced Diploma	7	11
Certificate	20	10
Year 12	1	35
Below Year 12	72	
Total	(N=332) 100*	(N=627) 100

Population: All NSW women in the HILDA survey aged 22 to 29 (inclusive) in 2011. Data is weighted. *Percentages do not total 100 due to rounding. Source: HILDA Release 11.0.

Young women's experiences 2001-11

So what happened in the next 10 years? How had things changed by 2011 when the women were in their thirties?

The changes appear modest. For those who completed high school, another 8 percent had acquired university qualifications and a further 5 percent had acquired vocational certificates. The overall proportion without any post-

school qualifications had fallen considerably, from 35 to 23 percent.

For early school leavers the progress, in relative terms, was also tangible. The proportion with university qualifications tripled, from 1 percent to 3 percent, while the proportion with vocational certificates increased considerably, from 20 percent to 34 percent. Consequently, the improvement in lowering the proportion without post-school qualifications was

also considerable: a drop from 72 percent down to 54 percent – leaving the qualification gap between school completers and non-completers as roughly 30 percentage points (see Table 3.3).

In other words, many women took up opportunities for 'second chance' education through their twenties and thirties, with the vocational education and training system providing an important vehicle for this choice.

Table 3.3 Educational outcomes in their thirties, NSW women by Year 12 completion

Highest level of education achieved by 2011	Whether completed Year 12 or not	
	Women who were early school leavers %	Women who completed high school %
University	3	53
Diploma/Advanced Diploma	8	10
Certificate	34	15
Year 12	1	23
Below Year 12	54	
Total	(N=200) 100	(N=418) 100*

Population: All NSW women in the HILDA survey aged 22 to 29 (inclusive) in 2011. Data is weighted. *Percentages do not total 100 due to rounding. Source: HILDA Release 11.0.

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Employment outcomes: then and now

Education has major implications for the employment prospects of individuals. What was the employment situation among these early school leavers in 2001 and how did it change by 2011?

In 2001, early school leavers were just as likely to be working part-time as those who completed high school (22 percent and 20 percent respectively), but they were only half as likely to be working full-

time (28 percent to 58 percent). Instead, they were more likely to be unemployed (8 percent compared with 2 per cent) and much more likely to have withdrawn from the labour market (44 percent compared with 20 percent).

By 2011, the situation was quite different. Those who had completed high school were more likely to be working part-time rather than full-time, no doubt because of increased parenting activities.

The most interesting comparison, however, is between those early school leavers who didn't gain any further education and those who did undertake further education. The latter had much higher levels of full-time labour force participation. Some 39 percent of them were working full-time, a figure not far below the 44 percent of high school completers, and twice as large as the 19 percent of early school leavers who did not gain further education.

Table 3.4 Employment outcomes, 2001 and 2011, by Year 12 completion

	Women who left school early			Women who completed high school	
	Total 2001 %	With no further education 2011 %	With further education 2011 %	2001 %	2011 %
Employed full-time	28	19	39	58	44
Employed part-time	22	33	32	20	35
Unemployed, looking for full-time work	5	1	3	1	1
Unemployed, looking for part-time work	3	2	2	1	1
Not in the labour force, marginally attached	22	16	4	8	4
Not in the labour force, not marginally attached	20	29	21	12	15
Total	(N=332) 100	(N=104) 100	(N=96) 100	(N=627) 100	(N=418) 100

Population: All NSW women in the HILDA survey aged 22 to 29 (inclusive) in 2011. Data is weighted.
Source: HILDA Release 11.0.

Conclusion

This insight into the path taken by early school leavers indicates that they find it harder to make the transition to either full-time work or full-time education, and generally to establish secure futures. However, it also indicates the potential benefits associated with re-entering education later in life – a path that

over one-third of the women took. Further research would be needed to learn more about those who do pursue so-called 'second chance education', to identify, for example, their socio-economic background or other ways they may differ from the young women who do not.

In NSW, 12 percent of girls and 15 percent of boys aged 15 to 19

years were not actively engaged in either work or education in 2011. These young people, disproportionately from low socio-economic and rural backgrounds, clearly constitute an at-risk social group. The analysis above shows the importance of remediating opportunities being kept open for them in their later lives.

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Topic 2 Vocational education and training

Vocational education and training (VET) provides employment-related

skills across a wide range of vocations. As the Focus Topic in this chapter shows, it is the avenue for people of all ages to develop skills to enter or re-enter the labour force, and to deepen their capabilities for existing jobs. The

indicators in this section report on participation in VET courses (2.1) and attainment of VET qualifications (2.2).

2.1 Vocational education and training participation

Participation in a VET course by people 15-64 years

Current position	<p>9.6 percent of women aged 15 to 64 years in NSW (235,900) participated in government-funded VET in 2011 compared with 8.8 percent (214,800) men.</p> <p>Gender gap</p> <ul style="list-style-type: none"> There were 21,000 more women who participated in a government-funded VET course in 2011 than men.
The direction of change over time	<p>The participation rate for both women and men aged 15 to 64 years has remained relatively steady from 2007 to 2011, with rates ranging from 9.3 percent to 9.8 percent for women and 8.6 percent to 9.1 percent for men.</p>
Discussion	<p>There is considerable variation among subgroups of women (see Figure 3.4). Women with a disability are considerably under-represented. In 2009, the last data available, they made up 19 percent of the NSW population, but comprised just 7 percent of VET students.</p> <p>Aboriginal women comprised 5.3 percent of VET students in 2011 compared to 2.5 percent of the NSW population. Women who were born overseas in a non-English speaking country were under-represented on a population share basis; they comprised 21 percent of VET students compared to 25 percent of the NSW population.</p>

Indicator 2.1 reports on the number and rate of women and men's participation in government funded VET in NSW, in courses at all AQF levels. Government-funded VET includes students funded by the Commonwealth and NSW Governments and does not include students paying fee-for-service to private registered training organisations (RTOs) or school-based VET students. The rate is based on the number of students as a proportion of the population aged 15 to 64 years, and refers to the highest course undertaken by the student.

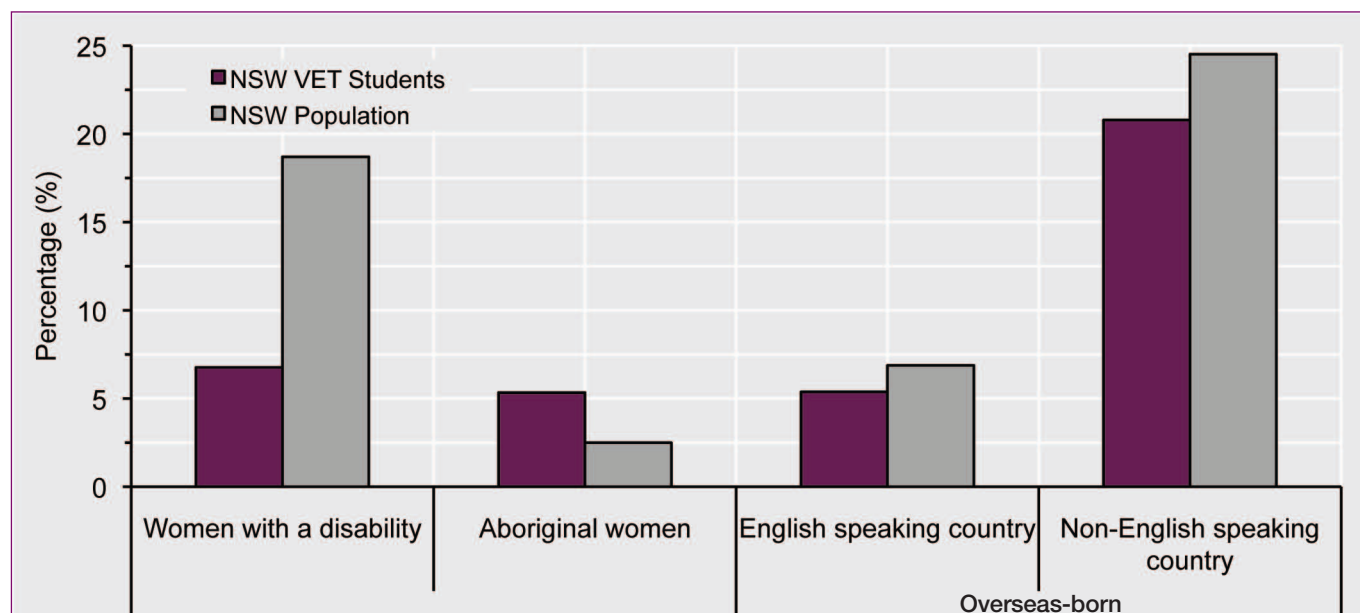
Year collected: 2011; 2009 (disability data).

Data source: Productivity Commission, *Report on Government Services 2013*, Chapter 5; VOCSTATS, Students and Courses Collection and ABS Census of Population and Housing 2011.

More information is available at www.pc.gov.au and www.ncver.edu.au

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Figure 3.4 Women participating in VET courses compared with NSW population, 2011



Note: This graph compares the percentage of students within VET courses that belong to the individual subgroups with the total percentage of that subgroup within NSW. For example, 7 percent of female VET students identify as having a disability whereas some 19 percent of women in NSW identify as having a disability. This shows that women with a disability are under-represented in VET courses. Some women may fall within multiple categories.

Population: Students who gave NSW as their usual place of residence.

Source: VOCSTATS, Students and Courses Collection. Population figures for women with a disability are taken from the ABS (2010) *Disability, Ageing and Carers, Australia 2009*. Cat no. 4430.0 and for all other women from the Census of Population and Housing 2011.

2.2 Qualifications at AQF Certificate III and above

Qualifications at Australian Qualification Framework (AQF) Certificate III and above held by 20 to 64-year-olds

Current position	<p>In 2012, 59 percent of women 20-64 years had attained qualifications at AQF Certificate III and above. This compares to 62 percent of men.</p> <p>Gender gap</p> <p>Among the prime working-aged population, the gap between women and men with qualifications at Certificate III and above is 3.6 percent in men's favour.</p>
The direction of change over time	<p>Completion rates have continued to grow since 2011. During the last year, women's completion rates improved faster than men's (4.4 percentage point increase in the proportion of women with qualifications at AQF Certificate III and above compared to 2.6 percentage points increase for men) resulting in the gender gap closing from 5.4 to 3.6 percentage points.</p> <p>The percentage of 20 to 64-year-olds with qualifications at Certificate III and above has grown rapidly in NSW over the last decade, from 45 percent of the population in 2002 to 61 percent in 2012 (both sexes). Nationally 54 percent of working-age women have a post-school qualification at Certificate III or above compared to 59 percent in NSW.</p> <p>Figure 3.5 shows that women's qualification rate has increased at a faster rate over the last decade compared to the rate of men, changing by 20 percentage points from 39 to 59 percent.</p>

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Discussion	<p>The proportion of people with qualifications at Certificate III or above differs significantly amongst those from varying socio-economic status. The gender gap is smallest (3.6 percent) among those in the higher socio-economic groups and largest (6.2 percent) among those in the middle socio-economic groups (see Figure 3.6).</p> <p>As noted in last year's Report, women in the younger age groups are more qualified than their male counterparts and are more educated than their mother's generation.</p>
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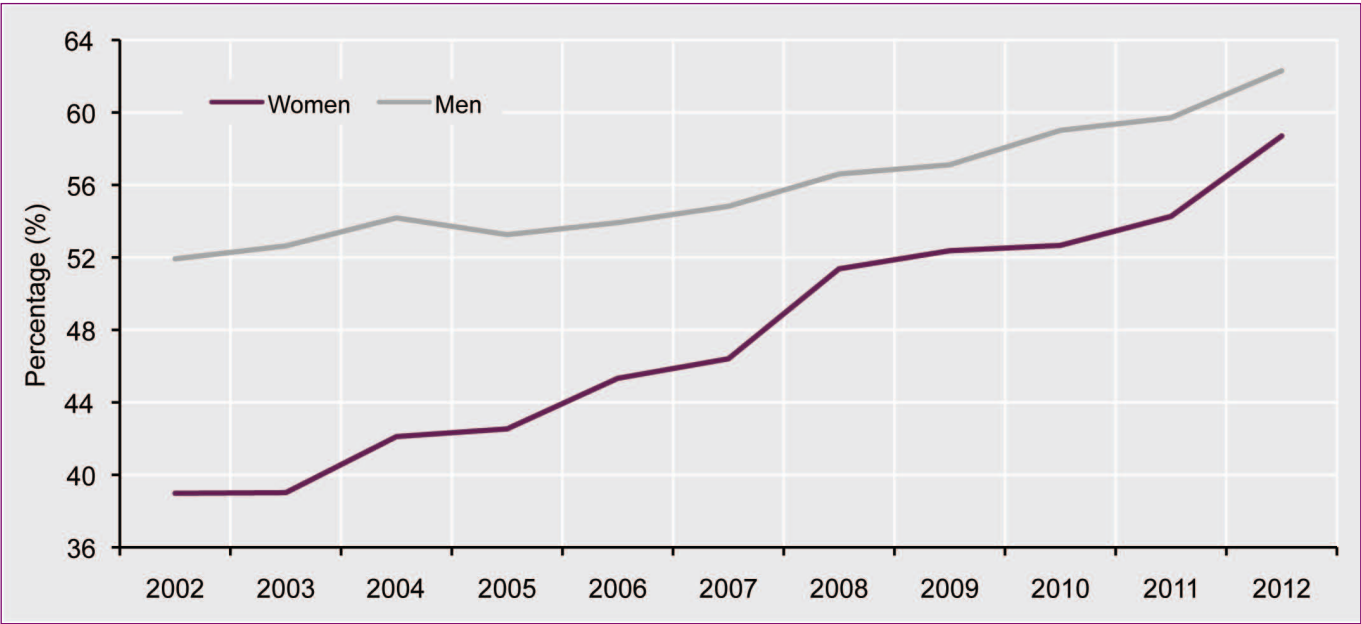
Indicator 2.2 describes gender differences in a key long-term national performance measure, the holding of Certificate III, which is regarded as a minimum non-school qualification. This indicator is regarded as a useful stock measure for the skills base of the workforce (noting that skills are also acquired through informal work and life experience).

Year collected: 2012 and previous years.

Data source: ABS (2012 and previous years) *Education and Work, Australia, May 2012*. Cat no. 6227.0, unpublished data.

More information is available at www.abs.gov.au

Figure 3.5 Women and men with qualifications at AQF Certificate III or above, 2002-12

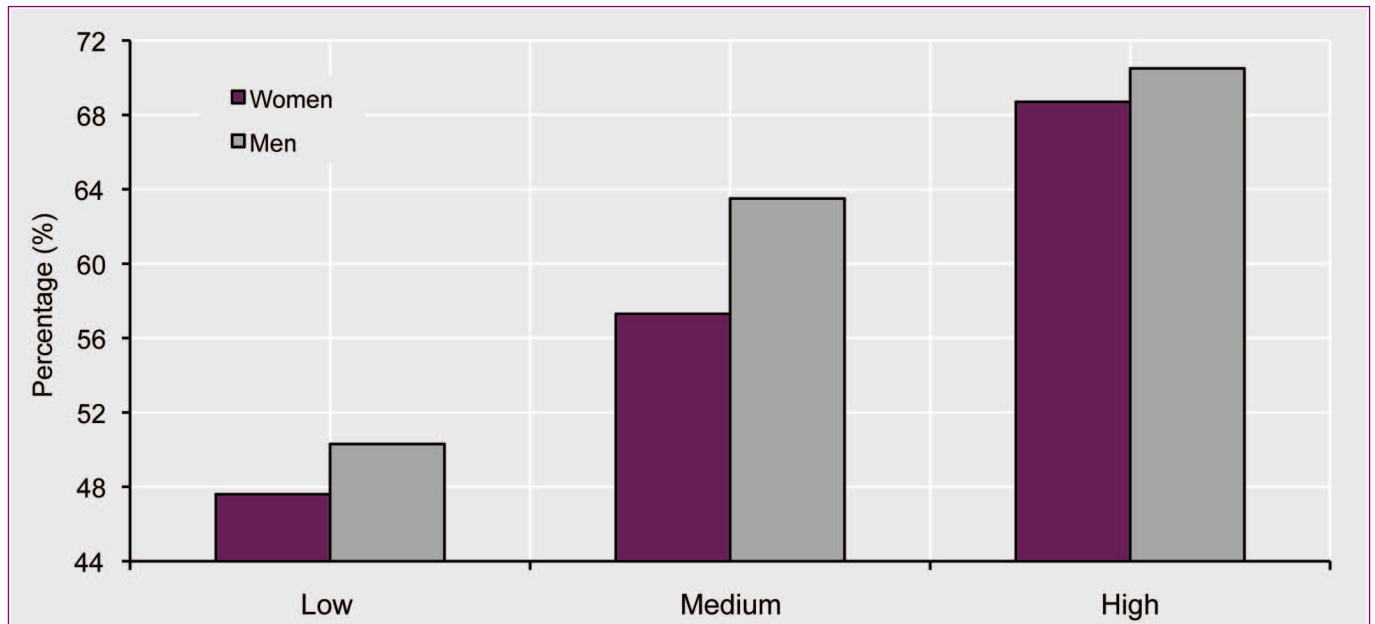


Population: NSW residents aged 20 to 64 years.

Source: ABS (2012 and previous years) *Education and Work, Australia*. Cat no. 6227.0.

Education and learning

Figure 3.6 People with qualifications at Certificate III or above, by socio-economic status



Note: Socio-economic status is measured using the ABS SEIFA Index of Relative Socio-Economic Disadvantage.

Population: NSW residents aged 20 to 64 years.

Source: ABS (2012 and previous years) *Education and Work, Australia, May 2012*. Cat no. 6227.0, unpublished data.

Topic 3 Apprenticeships and traineeships

Apprenticeships and traineeships are distinctive among VET courses in that people undertaking them are contracted to an employer

for an established period. They often result in qualifications that are considered to be the minimum requirements for an occupation, and may be specified in legislation or industrial instruments. The number of apprentices and trainees of both sexes has been increasing in NSW in recent years.

The indicators below look at the comparative rates of women and men commencing and completing apprenticeships and traineeships (Indicator 3.1), and then in more detail at technical and trade apprenticeships and traineeships (Indicator 3.2).

Education and learning

3.1 Apprenticeships and traineeships

Apprenticeship and traineeship commencements and completions

Current position	<p>44,049 women in NSW <i>commenced</i> an apprenticeship or traineeship in the 12 months to September 2012, compared with 53,862 men.</p> <p>23,819 women and 29,703 men <i>completed</i> an apprenticeship or traineeship in NSW in the same period.</p> <p>Gender gap</p> <ul style="list-style-type: none"> Nearly 10,000 fewer women than men commenced apprenticeships and traineeships in NSW in the 12 months to September 2012. This is a 10 percentage point gap between men and women or a ratio of four women to every five men. Nearly 6,000 fewer women than men completed an apprenticeship or traineeship in NSW in the year to June 2012. This is a 11 percentage point gap between men and women or a ratio of four women to every five men.
The direction of change over time	<p>In 2011, 10,700 fewer women than men <i>commenced</i> apprenticeships and traineeships. The gap was similar but slightly smaller (9,800) in 2012.</p> <p>The gender gap in <i>completions</i>, however, has closed from nearly 6,500 in 2010-11 to just under 6,000 in 2011-12.</p> <p>The ratio of women to men undertaking apprenticeships and traineeships has been closing gradually since 1994-95 (see Figure 3.7). The proportion of women commencing an apprenticeship or traineeship has increased from 27 percent of the total in 1994-95 to 45 percent in 2011-12.</p>
Discussion	<p>Whilst the numerical gap in commencements continues to grow the percentage gap has shrunk. The reason the percentage gap continues to shrink whilst the numerical gap doesn't is due to the larger percentage increase in the numbers of women compared to that of men. From 2010-11 to 2011-12 the number of women commencing an apprenticeship or traineeship grew by 6.6 percent compared to 3.3 percent for men.</p> <p>Women from regional and remote areas make up larger proportions of people commencing an apprenticeship or traineeship (34 percent) than their level of representation in NSW (27 percent). Of particular note is that there are nearly twice as many outer regional and three times as many students from remote and very remote areas than these groups' representation in NSW.</p>

Apprenticeships and traineeships differ in that apprenticeships are longer, at three to four years, and are generally found within traditional trade occupations while traineeships are shorter, at one to two years, and are found across a broader range of occupations.

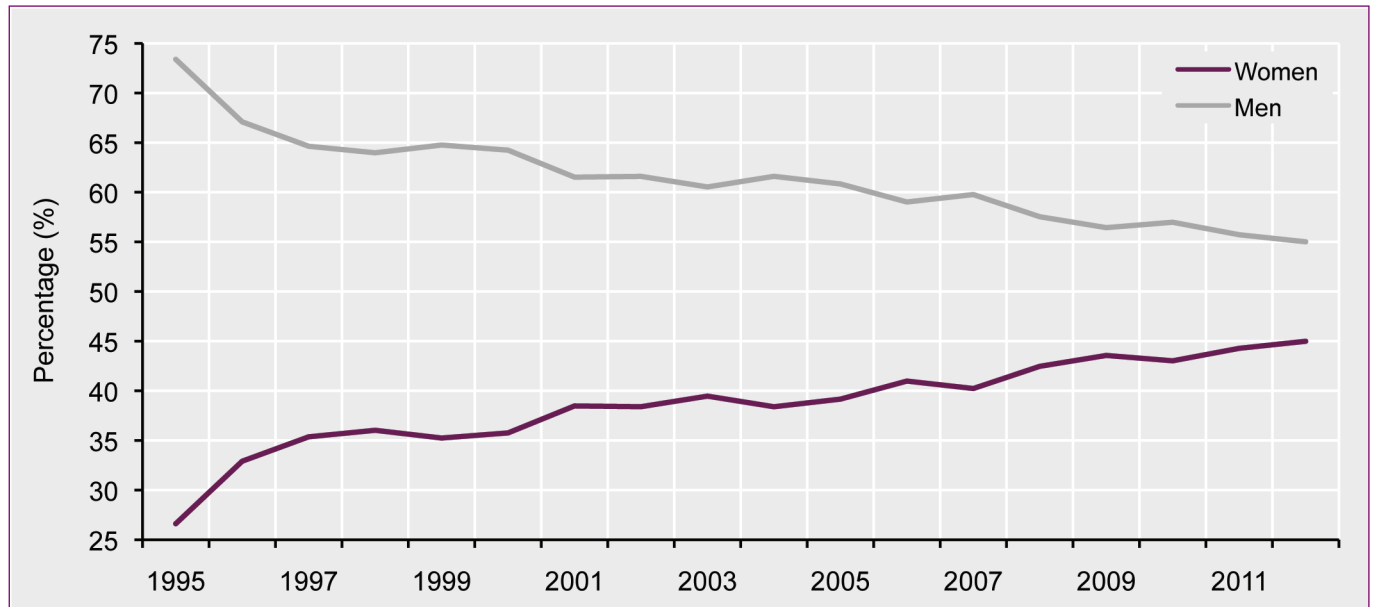
Year collected: 2011-12.

Data source: Average four quarters to September 2012, NCVER, Apprentices and Trainees Collection.

More information is available at www.ncver.edu.au

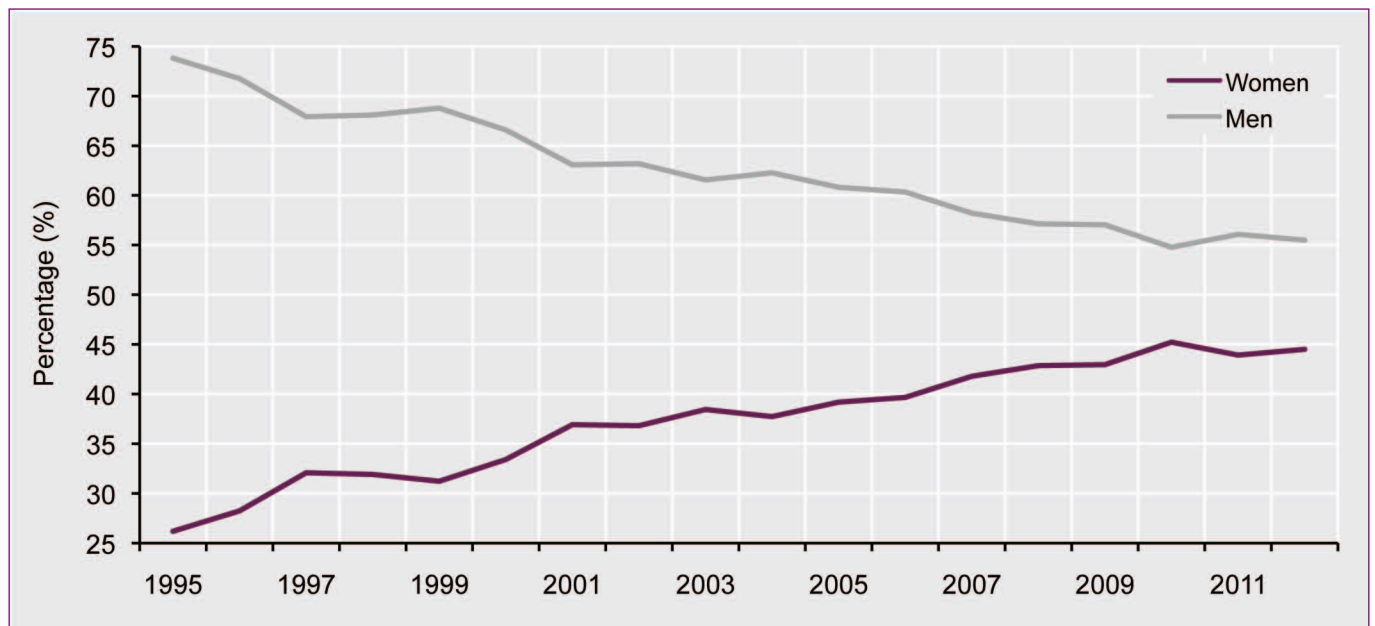
Education and learning

Figure 3.7 Women and men's share of apprenticeship or traineeship commencements, 1995-2012



Population: NSW residents who commenced an apprenticeship or traineeship between 1995 and 2012.
Source: VOCSTATS, Apprentices and Trainees collection.

Figure 3.8 Women and men's share of apprenticeship or traineeship completions, 1995-2012



Population: NSW residents undertaking an apprenticeship or traineeship between 1995 and 2012.
Source: VOCSTATS, Apprentices and Trainees collection.

Education and learning

3.2 Women's participation in technical and trade training

Participation in apprenticeships and traineeships in technical and trade occupations

Current position	<p>In the 12 months to September 2012, 2,478 women completed an apprenticeship or traineeship in a technical or trade occupation, representing 17 percent of total female apprenticeship and traineeship commencements.</p> <p>In the 12 months to September 2012, 4,603 women commenced an apprenticeship or traineeship in a technical or trade occupation, representing 16 percent of total female apprenticeships and traineeships.</p> <p>Gender gap</p> <ul style="list-style-type: none"> In 2012, there were nearly 17,500 fewer women than men who commenced an apprenticeship or traineeship in a technical or trade occupation.
The direction of change over time	<p>Participation in technical and trade apprenticeships and traineeships has increased a little among both sexes in the last decade.</p> <p>In 2012, there were nearly 11,000 fewer women than men who completed an apprenticeship or traineeship in a technical or trade occupation.</p> <p>While the proportion of men and women commencing and completing technical and trade apprenticeships and traineeships has remained constant (between 14 and 18 percent women from 2003-12 for both commencements and completions) the numerical gap has grown substantially (see Figure 3.9).</p>
Discussion	<p>Apprenticeships and traineeships in technical and trade occupations make up 27 percent of all apprenticeship and traineeship commencements in NSW. The majority are male-dominated according to the NSW Government definition of having 25 percent or fewer women (see below). Only the food trades and the other trade groups (which includes hairdressers) are not male-dominated.</p> <p>Of the total number of women commencing a technical or trade apprenticeship or traineeship in 2012, 4 percent were animal attendants and trainers, 6 percent were medical technicians, 12 percent were cooks and 28 percent were hairdressers. In contrast, 6 percent of males were cooks and 1 percent were hairdressers with the vast majority of males (49 percent) undertaking construction, automotive and engineering trades.</p> <p>From 2002 to 2012 there has been a slight increase in the percentage of women commencing a construction, automotive and engineering trade.</p>

Trades' apprentices and trainees are people whose apprenticeship or traineeship was in one of the occupations in the ANZSCO (Australia and New Zealand Standard Classification of Occupations) 2006, Major Group 3, *Technicians and Trade Workers*. This group includes: engineering, ICT and science technicians, automotive and engineering trades workers, construction trades workers, electrotechnology and telecommunications trades workers, food trades workers, skilled animal and horticultural workers and other technicians and trades workers.

The NSW Government defines occupations or training as 'male-dominated' where 25 percent or less of participants are women.

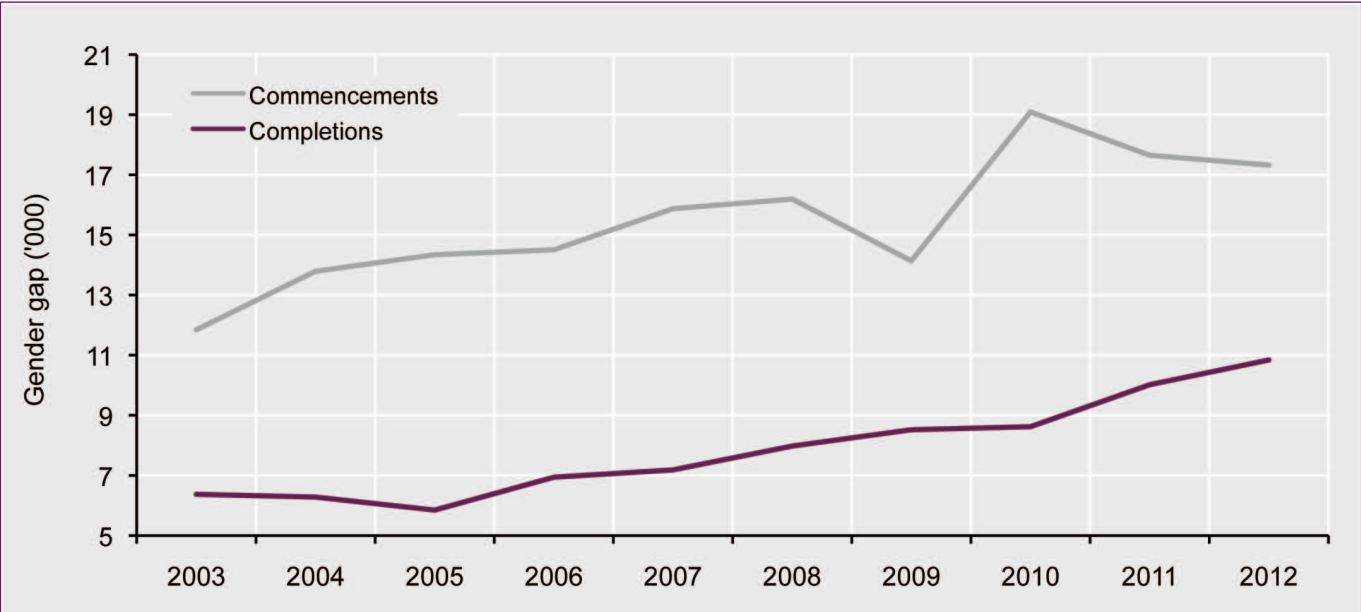
Year collected: 2012.

Data source: 12 months to September quarter 2012, NCVET, Apprentices and Trainees Collection.

More information is available at www.ncver.edu.au

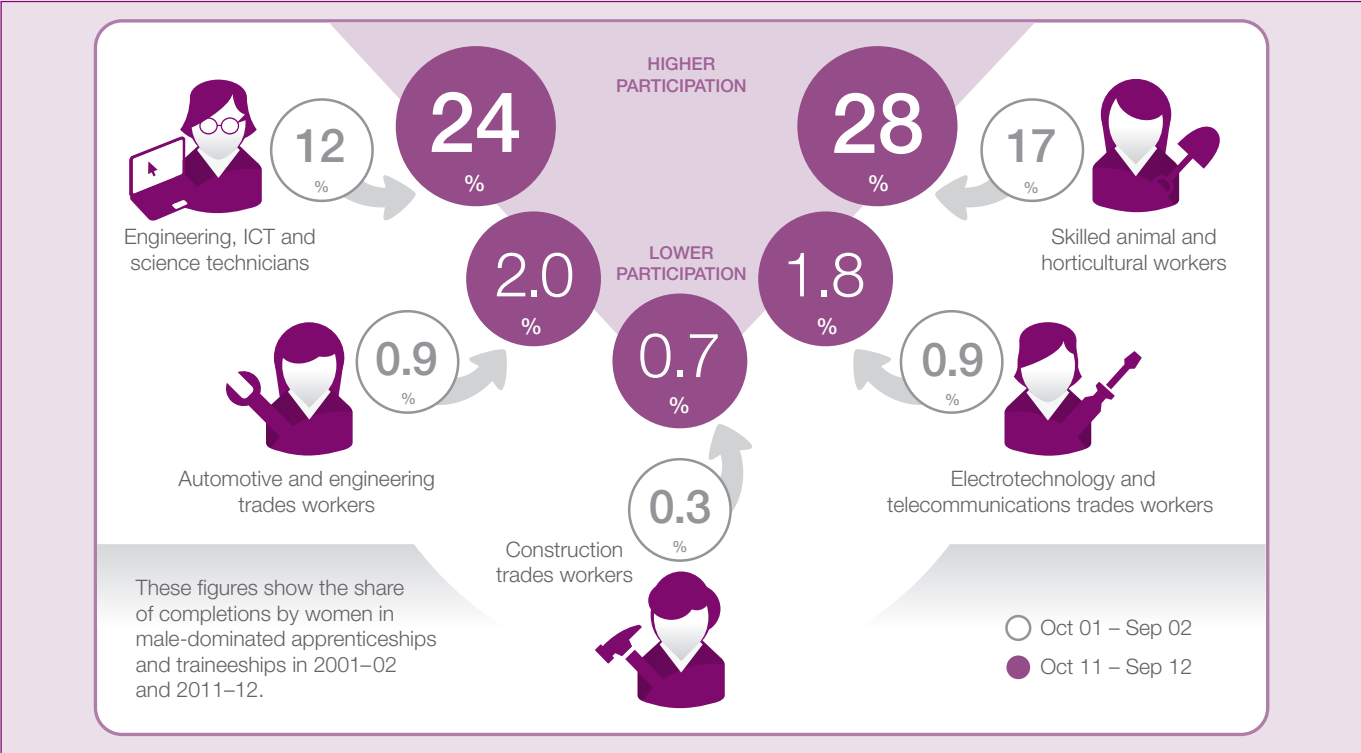
Education and learning

Figure 3.9 Technician and trade apprenticeships and traineeships, 2003-12



This graph shows the numerical gender gap in both commencements and completions. Despite that percentage gap remaining consistent the numerical gap continues to increase.
 Note: Not further defined (NFD) occupations are not included.
 Population: Year to September 2012 and year to September 2011.
 Source: VOCSTATS, Apprentices and Trainees Collection.

Figure 3.10 Selected trade and technical apprenticeships and traineeships over time



Population: NSW residents who completed a technician and/or trade apprenticeship or traineeship, 2002 and 2011.
 Source: VOCSTATS, Apprentices and Trainees Collection.

Education and learning

Topic 4 Higher education

In Australia, the term 'higher education' generally refers to education at degree level and

above. Formally, higher education courses are those leading to the award of undergraduate qualifications and postgraduate qualifications (see below). Almost all higher education in Australia is offered by universities. The

indicators below look at number of female and male students at undergraduate (Indicator 4.1) and postgraduate (Indicator 4.2) levels and at undergraduate student subject choice (Indicator 4.3).

4.1 Undergraduate students

Students participating in higher education at the undergraduate level

Current position	<p>In 2011, women made up 57 percent of NSW undergraduate students (120,774 in total). Men made up 43 percent (92,322) of undergraduate students.</p> <p>Gender gap</p> <ul style="list-style-type: none"> Some 28,500 more NSW women than men were enrolled in an undergraduate higher education course in 2011, a 13 percentage point gap in women's favour.
The direction of change over time	<p>In recent years, enrolment numbers of NSW students in Bachelor's degrees have been steadily increasing for both women and men. From 2010 to 2011 the gap closed slightly in favour of men.</p> <p>There has been a 23 percent increase in the number of women studying undergraduate courses from 2006 to 2011 (see Figure 3.11) compared with a 26 percent increase in the number of men, so the gap between women and men has closed slightly in this period.</p>
Discussion	<p>Three out of four female undergraduate students are under the age of 25. Of all female undergraduate students just over 2 percent were aged 50 and over.</p> <p>Women born in Australia are amongst the least qualified of all women living in NSW with only 22 percent having attained an undergraduate qualification or higher. 56 percent of women born in Southern and Central Asia and 47 percent born in the Americas, North East Asia and the Sub-Saharan Africa attained an undergraduate qualification or higher. The only group to have a lower percentage than Australian-born women with undergraduate degrees are those from Southern and Eastern Europe (see Figure 3.12).</p> <p>The educational gap for Aboriginal women is still acute, with only 8 percent of Aboriginal women having attained an undergraduate qualification or higher in 2011.</p>

This indicator reports on all domestic students enrolled in undergraduate courses in Australia who in 2011 gave NSW as their state of permanent home location.

Undergraduate qualifications (associate and Bachelor's degrees and some advanced diplomas and diplomas) and postgraduate qualifications (graduate certificate, graduate diploma, Masters and doctoral degrees by research or coursework).

Year collected: 2011 and proceeding years.

Data source: Department of Innovation, Higher Education Statistics Collection (Student Collection), unpublished data.

More information is available at www.innovation.gov.au/highereducation

Education and learning

Table 3.5 Undergraduate and postgraduate course commencements, NSW, 2011

Course level	Women %	Total Students
Undergraduate total	57	221,907
Bachelor's graduate entry	56	5,011
Bachelor's honours	60	3,014
Bachelor's pass	57	197,061
Associate degree	36	3,786
Advanced Diploma	48	1,586
Diploma	48	2,463
Other undergraduate award courses	58	8,986
Postgraduate total	57	68,374
Doctorate by research	54	9,722
Doctorate by coursework	55	244
Masters by research	52	2,114
Masters by coursework	57	36,391
Postgrad. Qual/Prelim.	63	87
Grad. (Post) Dip.	60	11,436
Graduate Certificate	56	8,380

Population: NSW residents who enrolled in a higher education course in 2011.

Source: Department of Innovation, Higher Education Statistics Collection, (Student Collection), unpublished data. Explanation of the listed qualifications can be found at www.aqf.edu.au

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4.2 Postgraduate students

Students participating in higher education at the postgraduate level

Current position	<p>In 2011, women made up 57 percent of NSW postgraduate students (38,836). Men made up 43 percent (29,538) of postgraduate students.</p> <p>Gender gap</p> <ul style="list-style-type: none"> 9,500 more NSW women than men were enrolled in a postgraduate higher education course in 2011, a 14 percentage point gap in women's favour.
The direction of change over time	<p>The number of women studying postgraduate degrees has increased by 30 percent since 2006 (data not shown). This rate of growth is faster than the growth in undergraduate enrolments which was 23 percent. Men's participation also increased but more slowly at 16 percent change since 2006. From 2010 to 2011 the gap grew by 1.1 percent in favour of women.</p> <p>During this time the ratio of women to men commencing postgraduate degrees has increased slightly from 1.17: 1 to 1.31: 1.</p>
Discussion	<p>The growth in the postgraduate enrolment gender gap occurred most rapidly in Masters degrees (see Figure 3.11).</p> <p>More than half (56 percent) of all female postgraduate students are aged 30 and over and 11 percent are aged 50 and over.</p> <p>In 2011 only 3 percent of Australian-born women in NSW had attained a postgraduate qualification. In contrast, 18 percent of those born in Southern and Central Asia, 12 percent of those born in North-East Asia and 11 percent of those born in the Americas had a postgraduate qualification (see Figure 3.12).</p> <p>Only 1 percent of Aboriginal women had attained a postgraduate qualification in 2011.</p>

This indicator reports on all domestic students enrolled in postgraduate courses in Australia who in 2011 gave NSW as their state of permanent home location.

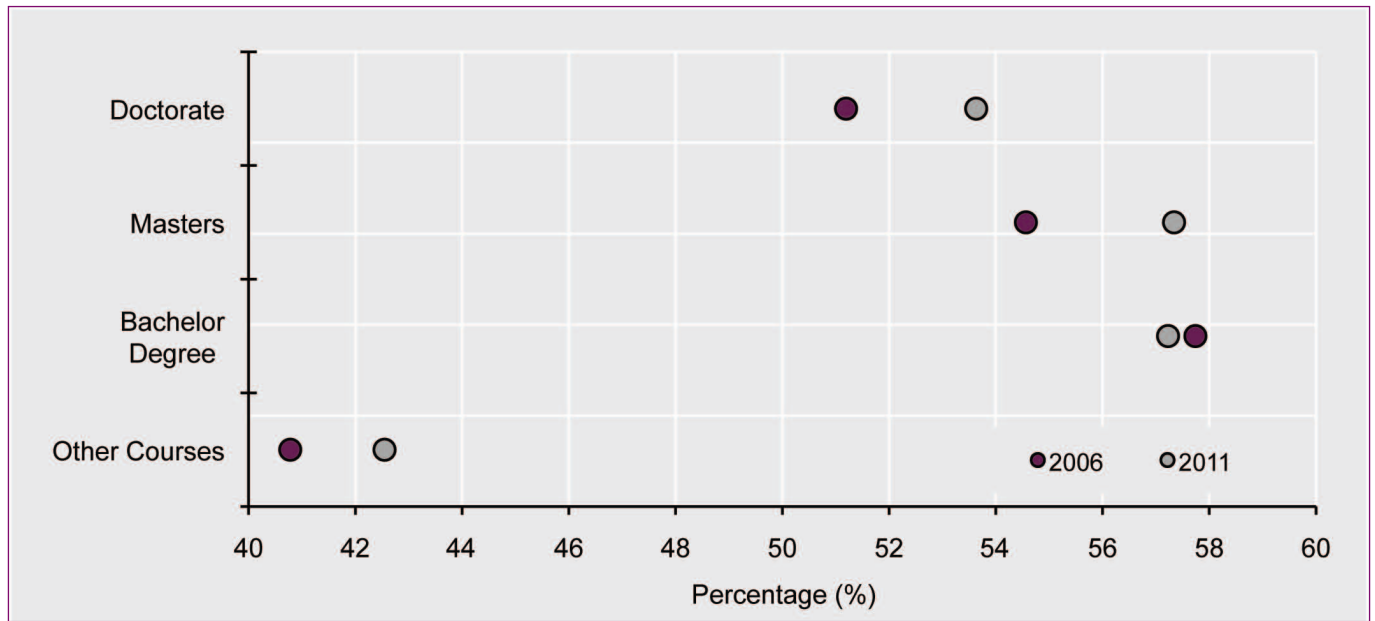
Year collected: 2011.

Data source: Department of Innovation, Higher Education Statistics Collection (Student Collection), unpublished data.

More information is available at www.innovation.gov.au/highereducation

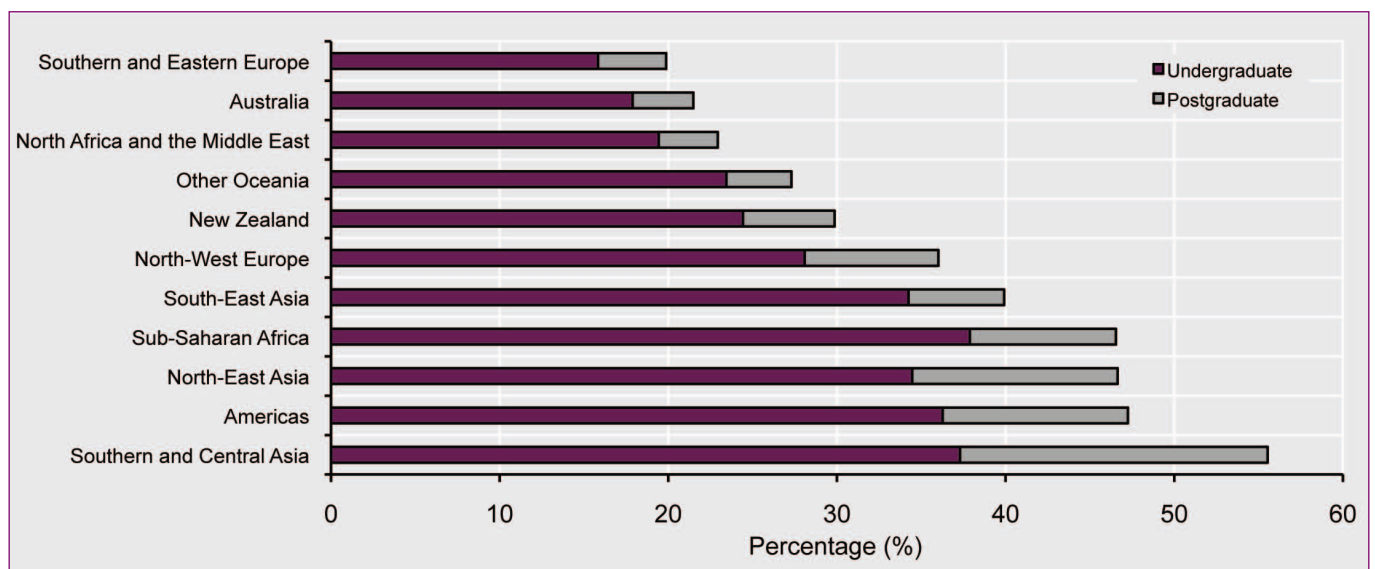
Education and learning

Figure 3.11 Women's share of enrolments by course level, 2006 and 2011



Note: Masters level enrolments in the above figure include: graduate certificate, graduate diploma and Masters degrees by research or coursework. Bachelor's degree enrolments include: Bachelor's graduate entry, Bachelor's honours and Bachelor's pass. Other courses include: associate degree, advanced diploma, diploma and other undergraduate award courses.
Population: NSW residents who enrolled in a higher education course in 2006 and 2011.

Figure 3.12 Women undertaking higher education by country of birth, NSW domestic students, 2011



Population: NSW women who were enrolled in a higher education course in 2011.

Source: Department of Innovation, Higher Education Statistics Collection (Student Collection), unpublished data.

Education and learning

4.3 Undergraduate field of education

Undergraduate enrolments in science, technology, engineering and mathematics subjects

Current position	<p>In 2011, 31 percent of women enrolled in an undergraduate course enrolled in a science, technology, engineering or mathematics (STEM) field. This compares to 41 percent of men.</p> <p>Gender gap</p> <ul style="list-style-type: none">Women are 10 percentage points less likely than men to enrol in undergraduate STEM courses at university.
The direction of change over time	<p>While the percentage of women enrolling in STEM courses has remained fairly constant (between 31 and 33 percent) between 2002 and 2011, the actual number of STEM enrolments for women increased by 11,946. By comparison, STEM enrolments for men increased by only 9,043, so that the percentage of men studying STEM courses fell from 46 to 41 percent over the period (see Figure 3.13).</p> <p>The largest number increases of STEM enrolments for women were nursing at 3,708 (63 percent growth) and behavioural science at 2,881 (83 percent). Percentage increases were greatest in health at 175 percent (to 454 students) and dental studies at 324 percent (to 504 students).</p> <p>An instance where increased STEM enrolments for men was not matched by an equivalent increase in women was civil engineering, an increase of 1,039 men and 209 women between 2001 and 2010, although the percentage change for women was greater off a low base).</p> <p>Information technology has become less popular with both men and women since 2002. Women's enrolments fell 60 percent to just 975 enrolments in 2011 and the number of men fell 32 percent to 5,393 enrolments.</p>
Discussion	<p>Information technology and engineering and related technologies stand out as the courses where the difference between women and men is greatest.</p> <p>On average, less than 16 percent of participants in these courses were women. 86 percent of engineering students (across all fields of engineering) were men. In 2011, 12 percent of men were enrolled in engineering which is also one of the highest paid graduate careers (see Indicator 5.2). The figure for women was 1.4 percent.</p>

STEM enrolments for this indicator include enrolments by domestic students in several fields of education. Behavioural science is considered a STEM subject despite falling within the Society and Culture study area. Where students undertake double degrees these are counted as two enrolments.

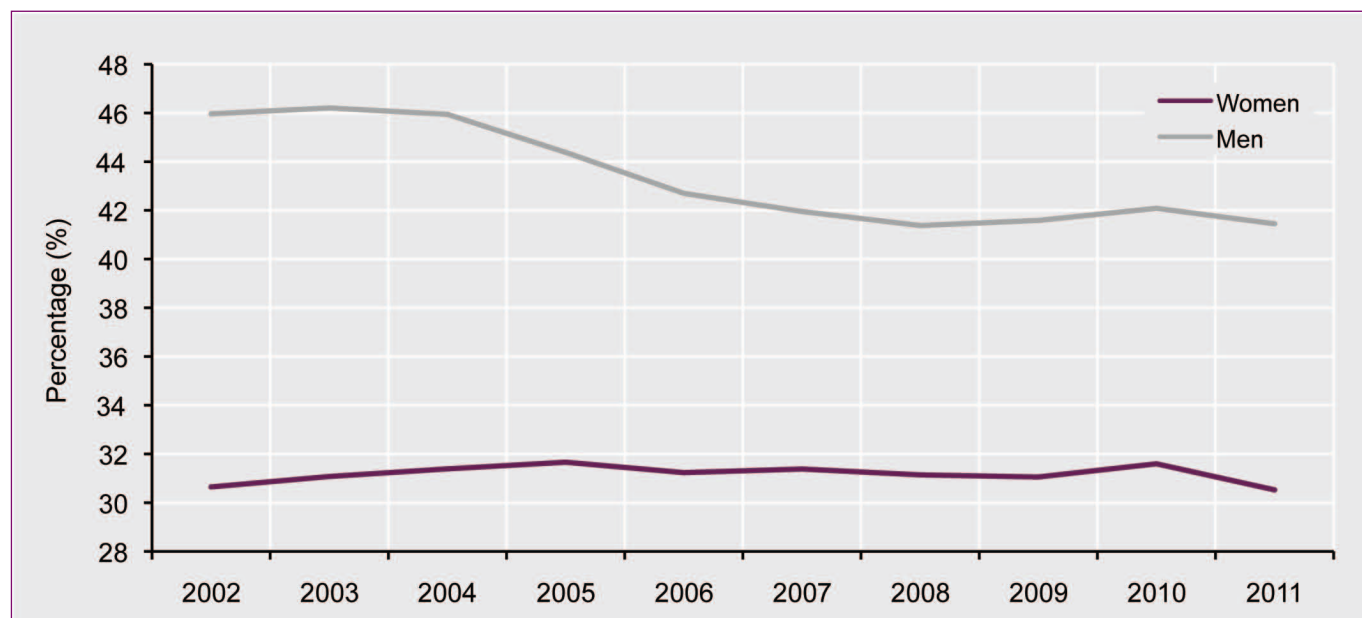
Year collected: 2011.

Data source: Department of Innovation, Higher Education Statistics Collection (Student Collection), unpublished data.

More information is available at www.innovation.gov.au/highereducation

Education and learning

Figure 3.13 Undergraduate STEM enrolments, by sex, 2002-11



Note: STEM fields include science, technology, engineering and mathematics subjects.

Population: Domestic NSW residents who enrolled in an undergraduate course in 2011 and previous years.

Source: Department of Innovation, Higher Education Statistics Collection (Student Collection), unpublished data.

Table 3.6 Undergraduate STEM enrolments, NSW, 2011

Undergraduate fields of education	Share of women's enrolments %	Share of men's enrolments %
Natural and physical sciences (20,695)	7.1	9.3
Natural and physical sciences (4,270)	2.9	4.2
Mathematical sciences (235)	0.2	0.5
Physics and astronomy (38)	-	0.1
Chemical sciences (73)	-	0.1
Earth sciences (97)	0.1	0.2
Biological sciences (2,181)	1.5	1.5
Other natural and physical sciences (3,538)	2.4	2.7
Information technology (6,368)	0.7	4.9
Information technology (107)	0.1	0.5
Computer science (218)	0.1	1.3
Information systems (357)	0.2	1.8
Other Information technology (293)	0.2	1.2
Engineering and related technologies (15,111)	1.4	11.9
Engineering and related technologies (554)	0.4	4.1
Manufacturing engineering and technology (4)	-	-
Process and resources engineering (304)	0.2	0.9
Automotive engineering and technology (0)	-	-
Mechanical and industrial engineering and technology (252)	0.2	1.5

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Undergraduate fields of education	Share of women's enrolments %	Share of men's enrolments %
Civil engineering (368)	0.3	2.0
Geomatic engineering (12)	-	0.2
Electrical and electronic engineering and technology (156)	0.1	1.3
Aerospace engineering and technology (72)	-	0.4
Maritime engineering and technology (4)	-	0.1
Other engineering and related technologies (321)	0.2	1.4
Architecture and building (5,666)	1.3	3.4
Architecture and urban environment (1,684)	1.2	1.6
Building (195)	0.1	1.9
Agriculture, environmental and related studies (3,362)	1.0	1.7
Agriculture, environmental and related studies (56)	-	-
Agriculture (526)	0.4	0.4
Horticulture and viticulture (32)	-	0.1
Forestry studies (4)	-	-
Fisheries studies (0)	-	1.0
Environmental studies (846)	0.6	0.1
Other agriculture, environmental and related studies (26)	-	0.2
Health (31,153)	15.1	8.3
Health (454)	0.3	2.0
Medical studies (2,402)	1.6	1.4
Nursing (9,540)	6.5	0.5
Pharmacy (834)	0.6	0.3
Dental studies (504)	0.3	0.1
Optical science (174)	0.1	0.2
Veterinary studies (738)	0.5	0.1
Public health (361)	0.2	-
Radiography (646)	0.4	0.3
Rehabilitation therapies (2,751)	1.9	0.9
Complementary therapies (429)	0.3	0.1
Other health (3,217)	2.2	2.2
Society and culture (5,786)	4.0	1.9
Behavioural science (5,786)	4.0	1.9
Total STEM subjects (90,187)	30.5	41.4
Total non-STEM subjects (165,961)	69.5	58.6
Total course enrolments (256,148)	100.0	100.0

Note: STEM enrolments are enrolments by domestic students in science, technology, engineering and mathematics fields of education. Behavioural science is considered a STEM subject despite falling within the Society and Culture study area.

Population: Domestic NSW students who gave NSW as their permanent home location and who enrolled in an undergraduate course in 2011.

Source: Department of Innovation, Higher Education Statistics Collection (Student Collection), unpublished data.

Education and learning

Topic 5 Employment outcomes

The completion of formal education may signify the beginning of a woman or man's career, a change in career path or simply a formalisation of a set of skills. For those who have completed a formal education their next step is usually

employment. The indicators in this section focus on employment outcomes after completion of study. Indicator 5.1 refers to VET graduates and whether or not they are working in the same occupation as their training. Indicator 5.2 focuses on the graduate salary gap between women and men aged less than 25 with a Bachelor's degree.

5.1 VET graduates working in their field of study

Vocational education and training (VET) graduates working in the field for which they are qualified

Current position	<p>25 percent of NSW women aged 20 to 64 who hold a VET qualification are working in the same occupation as their training. This compares with 34 percent of men in the same age group.</p> <p>Gender gap</p> <ul style="list-style-type: none">• Amongst VET graduates aged 20 to 64 years, women are 9 percentage points less likely than men to work in a field for which their training was intended.
The direction of change over time	<p>There has been little change for either women or men since 2009. Figures for women ranged between 25 and 26 percent and for men ranged from 32 to 39 percent. Whilst both men and women have improved slightly since 2011 (25 to 26 percent for women and 32 to 34 percent for men) the improvement for men has been greater.</p>
Discussion	<p>The differences are greatest among women and men under 35 years (see Figure 3.13). For women aged 20 to 34 the gender gap is 16 percentage points whereas for women aged 35 to 64 the gender gap is 0.4 percentage points.</p> <p>Further analysis is required to determine why there is such a large gap between men and women under the age of 35. Reasons for this may include child bearing, further study or a change in career path.</p>

Same occupation in this data is determined by NCVER at the ANZSCO four-digit or unit group level, and is derived from matching the student's reported occupation six months after training has completed with the intended occupation for the training course in question (as described in Training Packages). Whilst the Student Outcomes Survey goes back to 2005, data on occupation after training is available from 2009. The data is reported here for the age group 20 to 64 years.

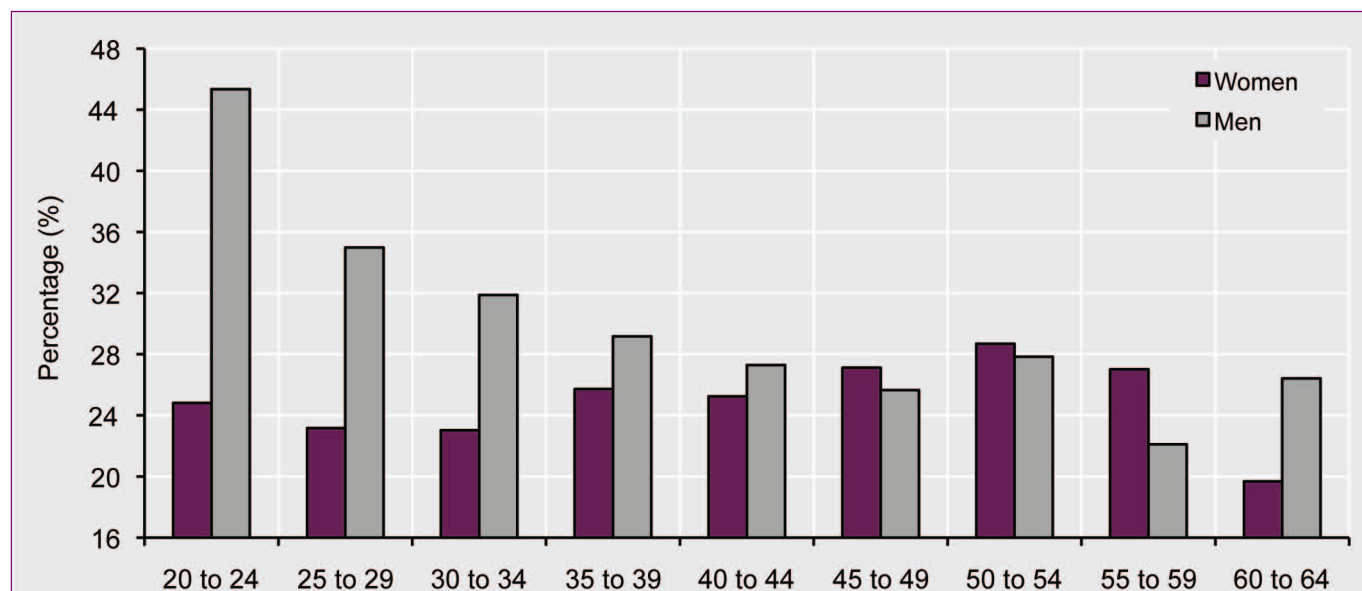
Year collected: 2011.

Data source: VOCSTATS, Student Outcomes Survey 2011.

More information is available at www.ncver.edu.au

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Figure 3.14 People working in their field of study, by age, NSW, 2011



Note: The figure shows the percentage of female and male VET graduates working in the same occupation as the intended occupation for the training course they undertook, six months after completing the course.
Population: VET graduates aged 20 to 64. Source: VOCSTATS NCVER Student Outcomes Survey 2011.

5.2 The graduate salary gap

Median starting salaries for young graduates

Current position	<p>In 2012, the median starting salary for women aged less than 25 with a Bachelor's degree in their first full-time job was \$50,000 per year. The median earnings of their male counterparts was \$55,000.</p> <p>Gender gap</p> <ul style="list-style-type: none"> The graduate salary gap between NSW men and women is around 9.1 percent or \$5,000 per year.
The direction of change over time	<p>Whilst the average starting salary for graduate women has grown consistently over the past 10 years, with the exception of last year, the salary received by graduate men has fluctuated (see Figure 3.15). As a result the size of the graduate salary gap has varied.</p> <p>The average gap for 2003 to 2012 was 5.7 percent. The gap was widest at 10.0 percent in 2008, before falling to 4.0 percent in 2010 and rising since then.</p> <p>In 2012, for the first time in the past decade, the starting salary of women was the same as the previous year, increasing the graduate salary gap by 1.8 percentage points or \$1,000.</p>

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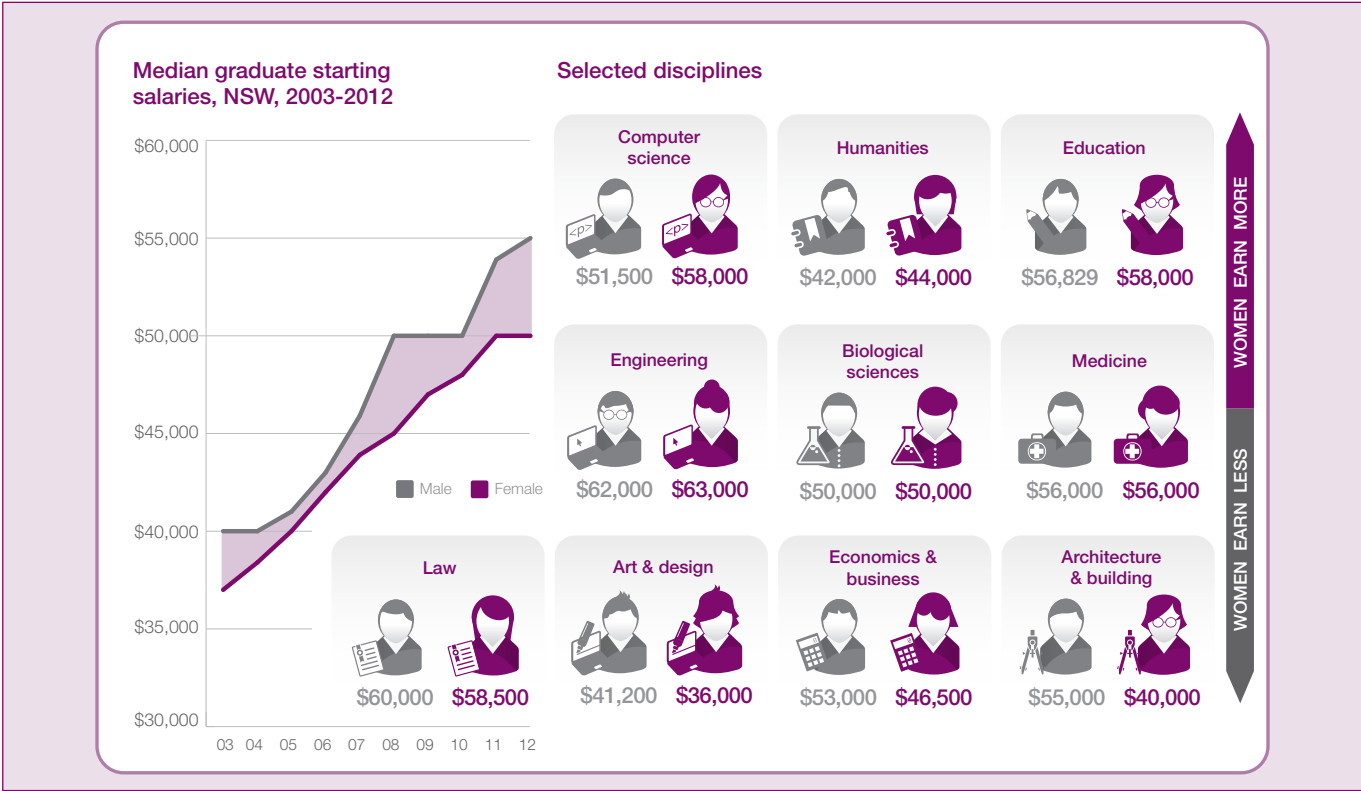
Discussion

The mining boom has created significant growth in the male-dominated disciplines of engineering and earth sciences. Engineering and earth sciences were amongst the highest paying jobs for graduates in 2012. In the past decade they have experienced significant growth in salary.

Figure 3.15 shows the gender salary gap in a selection of disciplines, including three (computer science, humanities and education) where women graduates earn more than men. The gap is largest in men's favour in architecture and building. It should be noted that there is a significant under-representation of women in the more lucrative building professions.

Year collected: 2011 and previous years.
Data source: Graduate Careers Australia, Australian Graduate Survey, 2011, unpublished data.
More information is available at www.graduatecareers.com.au and www.abs.gov.au

Figure 3.15 Median starting salaries after graduation, under 25, NSW, 2003 to 2012



Population: Bachelor's degree graduates under 25 working in their first full-time job.
Source: Graduate Careers Australia, Australian Graduate Survey, 2012.

Topic 6 Lifelong learning

Much of VET and higher education participation takes place in the years following compulsory

schooling. The indicators in this section focus more specifically on the further education and training people undertake throughout their lifetime. Indicator 6.1 refers to

work-related training and education that people undertake to improve their skills in their current job, move into new positions and/or meet professional or occupational standards.

Education and learning

6.1 Work-related learning

Participation in structured work-related learning in the last 12 months by employed people

Current position	<p>NSW working women aged 15 to 64 years undertake work-related training slightly more frequently than men – 34 percent in the past 12 months in 2011, compared with 31 percent of men (see Figure 3.16).</p> <p>Gender gap</p> <ul style="list-style-type: none"> Women's participation in work-related training is 3 percentage points higher than men.
The direction of change over time	<p>From 2007 to 2011 the participation levels have varied and as such show no trend. From 2007 to 2009 men had a higher participation rate than women, which has more recently turned in favour of women (see Figure 3.16).</p>
Discussion	<p>More research would be needed to determine systematic differences between women and men's engagement in work-related learning, including examination of the length and type of course. The last available ABS data (Survey of Education and Training, 2009) shows a similar percentage of people involved in work-related learning nationally (around 30 percent) with men slightly more likely to participate than women.</p>

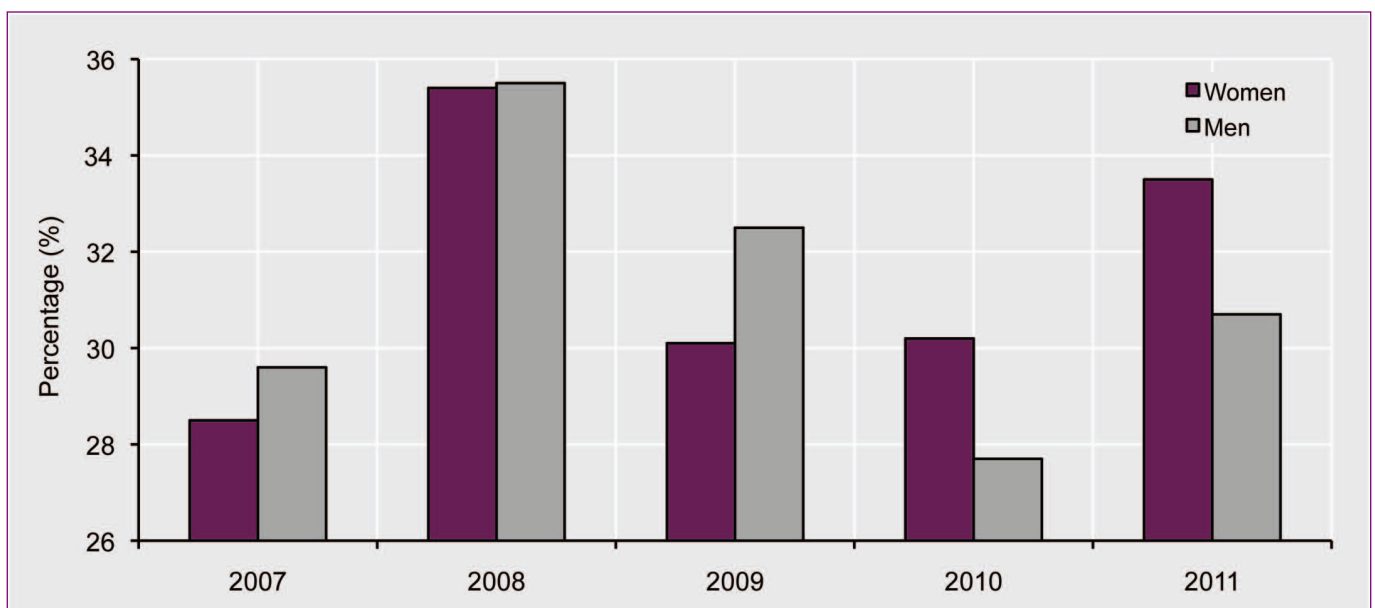
Structured work-related learning in the HILDA survey are courses that are planned in advance and have explicit attendance and assessment criteria.

Year collected: 2007 to 2011.

Data source: HILDA survey, Waves 7-11, 2007 to 2011.

More information is available at www.melbourneinstitute.com/hilda/ and www.fahcsia.gov.au

Figure 3.16 Participation in work-related learning by sex, 2007 to 2011



Note: Structured work-related learning is defined as courses that are planned in advance and have explicit attendance and assessment criteria.

Population: People aged 15 to 64 years who are currently employed, or have been employed during the last 12 months.

Source: HILDA survey, Waves 7-11, 2007 to 2011.

Education and learning

How does NSW compare?

The ABS publishes the *Gender Indicators, Australia* series every six months. It sets out a range of indicators against which it is possible to examine how women in NSW are faring compared with all women in Australia. Detailed information is contained in the Appendix.

Based on indicators used in the *Gender Indicators, Australia* January 2013 edition, the education outcomes of NSW women are similar to those of other women in Australia. The most noticeable gaps, where women in NSW have

better outcomes than other women in Australia, relate to participation in work-related learning in the past 12 months (3.1 percentage point gap). Other significant differences relate to young people's experiences. As reported above, NSW boys' Year 12 completion rates have improved significantly in the last year (girls' rates, historically higher than boys' have flat-lined). However, nationally girls' completion rates remain higher than boys'.

Women's educational participation and qualifications have been rising more quickly in NSW than Australia as a whole. In NSW in 2012, 59 percent of adult women had a post-school qualification at Certificate III and above, compared to 54 percent nationally.

The percentage of young women disengaged from either education or employment, was lower in NSW (12.2 percent) than nationally (14.3 percent) in 2012.

The graduate earnings gap, as last year, was higher in NSW than nationally with the median earnings of NSW women graduates \$5,000 less per annum than those of equivalent men in their first full-time job. Nationally, the difference between female and male graduates was \$2,000 per annum in 2011. NSW men's higher earnings (not NSW women's lower earnings) account for the larger gap in NSW.