

Trends in 'traditional apprenticeships'



Louise Brooks

Highlights

- 'Traditional apprentices', such as those undertaken in trades like plumbing, carpentry and hairdressing, have increased in number from 101 300 in December 1996 to 115 400 in December 2002.
- In December 2002, 'traditional apprenticeships' made up around one in three of all apprenticeships and traineeships.
- Over the same period the total number of apprentices and trainees rose by 205 800 to 369 100, meaning 'traditional apprenticeships' accounted for 7% of the total growth.
- 'Traditional apprentices' are overwhelmingly male, young, employed full time and training towards an AQF level III certificate.
- More than three in four of all teenagers employed in the trades at December 2002 were undertaking a 'traditional apprenticeship', up from around two in three at December 1996.
- Between 1996 and 2002, 'traditional apprentices' as a proportion of employed tradespersons was stable between 9% and 10%.
- Numbers of 'traditional apprentices' rose in some trades, such as construction but fell in others, such as mechanical and engineering.
- Apprentices and trainees are now found across all industries, not just those reliant on the trades, and they are increasingly likely to be female, older and employed part time.

© **Australian National Training Authority, 2004**

This work has been produced by the National Centre for Vocational Education Research (NCVER) with the assistance of funding provided by the Australian National Training Authority (ANTA). It is published by NCVER under licence from ANTA. Apart from any use permitted under the Copyright Act 1968, no part of this publication may be reported by any process without the written permission of NCVER Ltd. Requests should be made in writing to NCVER Ltd.

The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian National Training Authority.

ISBN 1 920895 33 7 print edition
1 920895 34 5 web edition
TD/TNC 76.07

Published by NCVER
ABN 87 007 967 311

Level 11, 31 King William Street, SA 5000, Australia
PO Box 8288 Station Arcade, SA 5000, Australia
<<http://www.ncver.edu.au>>

Contents

Tables and figures	4
Executive summary	6
Introduction	8
Growth in training activity	9
Recent activity	11
Commencements	11
Completions	11
Cancellations and withdrawals	12
‘Traditional apprentices’ in-training	12
Qualification levels	12
Duration	14
Characteristics of apprentices and trainees	16
Age	16
Teenage employment	18
Sex	18
Regions	18
Employer type	21
Apprentices and trainees and employment	22
Full-time/part-time apprenticeships and traineeships	22
Occupations	24
Industries	26
Occupation by industry	29
References	31
Endnote	32

Tables and figures

Tables

1	Growth for apprentices and trainees, 30 June 1980 to 2003	10
2	Commencements in the 12 months ending December ('000)	11
3	Completions in the 12 months ending December ('000)	11
4	Cancellations and withdrawals in the 12 months ending December ('000)	12
5	Apprentices and trainees in-training at 31 December ('000)	12
6	Apprentices and trainees in-training at 31 December by qualification (percentage)	14
7	Apprentices and trainees in-training at 31 December by expected duration (percentage)	15
8	Apprentices and trainees in-training at 31 December by age (percentage)	17
9	Apprentices and trainees in-training as a proportion of employed persons at 31 December (percentage)	17
10	Employment rates for teenage apprentices and trainees not in full-time education (percentage)	18
11	Apprentices and trainees in-training at 31 December by sex (percentage)	19
12	Apprentices and trainees in-training at 31 December by geographic region (percentage)	19
13	Apprentices and trainees in-training at 31 December by states and territories ('000)	20
14	Apprentices and trainees in-training at 31 December by employer type ('000)	21
15	Apprentices and trainees in-training at 31 December by employment status (percentage)	22
16	Apprentices and trainees as a proportion of full-time/part-time employed persons (percentage)	22
17	Female apprentices and trainees, part-time, at 31 December ('000)	23
18	Male apprentices and trainees, part-time, at 31 December ('000)	24
19	Apprentices and trainees in-training at 31 December by occupation (percentage)	25
20	Apprentices and trainees as a proportion of employed persons by occupation (percentage)	26
21	Apprentices and trainees in-training at 31 December by industry (percentage)	27
22	Apprentices and trainees in-training as a proportion of employed persons by industry (percentage)	28
23	Apprentices and trainees in-training at 31 December 2002, by occupation (ASCO) and industry (ANZSIC) ('000)	29
24	Apprentices and trainees in-training as a proportion of employed persons, occupation by industry, 2002 (percentage)	30

Figures

1	Growth in apprentices and trainees in-training at 30 June 1980 to 2003	9
2	Qualifications of apprentices and trainees in-training at 31 December ('000)	13
3	Expected duration for apprentices and trainees in-training at 31 December ('000)	15
4	Apprentices and trainees in-training at 31 December, by age groups ('000)	16

Executive summary

Traditional apprenticeships have been the focus of much attention in recent times and this publication provides a statistical portrait of them over the past six years. It shows a broadly constant pattern.

Since the end of 1996, the number of people employed as apprentices and trainees has grown by over 200 000, from 163 300 to 369 100 in December 2002. This period coincides with the introduction of the New Apprenticeships program in 1998, an initiative of the federal government to promote greater take-up of apprenticeships and traineeships, especially in industries where they were under-represented.

The data submitted to the National Centre for Vocational Education Research (NCVER) by states and territories does not separately distinguish apprentices from trainees. However, many policy-makers and researchers are interested in segmenting the apprentice and trainee population into two groups. In this publication, we use other information to develop a proxy indicator of 'traditional apprentices'. The definition we use is someone who is employed under a contract of training in a trades occupation, training towards a qualification at Australian Qualifications Framework (AQF) level III or higher, and the expected duration of that contract is more than two years for full-time workers (or more than eight years for part-time workers). This conforms to the common understanding of how somebody prepares themselves for a career in trades such as plumbing, carpentry and hairdressing.

Growth in the number of traditional apprentices accounts for only 7% of the total growth in all apprenticeships and traineeships between 1996 and 2002. As a consequence, their share of the total number fell from around two-thirds in 1996 to one-third in 2002. In part, this is a reflection of the fact that the total number of people employed as tradespersons has not altered much over the same period. This can be captured by changes in the training *rate*—the number of apprentices and trainees in a given occupation group as a percentage of people employed in the same group. For traditional apprentices this has increased from 8.9% in December 1996 to 9.8% in December 2002, against a change in the training rate of 2.0% to 4.0% for the labour market as a whole.

As at December 2002, there were 115 400 'traditional apprentices'. These were overwhelmingly male (101 600) and young (101 200 under 25 years of age), two characteristics which have stayed remarkably constant over time. The 'traditional apprenticeship' remains very much a major pathway for young men making the transition from school to work. More than three in four of all teenagers employed in the trades in 2002 were undertaking a 'traditional apprenticeship', up from around two in three in 1996.

The basic structure of 'traditional apprenticeships' continues to endure. In 2002, all were full time, 99% were at AQF level III and 82% had an expected duration of between three and four years. These proportions were almost identical to those of six years ago. Four in five traditional apprentices are employed by companies in the private sector, but a growing proportion—close to one in five—is employed through group training companies.

Within the traditional apprenticeships group, some trades have grown in number while others have fallen. For example, the number employed in construction trades has risen from 20 800 in 1996 to 28 700 in 2002, while the number employed in mechanical and engineering trades fell from 18 600 to 14 300 over the same period. These changes are also reflected in the training rates. For two trades in particular—mechanical and engineering, and automotive—the fall in 'traditional apprentice' numbers has outpaced the decline in total employment in that trade, leaving industries reliant on those trades less well placed to meet future skill needs.

The portrait of ‘traditional apprenticeships’ provided here is, broadly, one of constancy over the past six years. The overall portrait of apprenticeships and traineeships, in contrast, shows a lot of change. Numbers have more than doubled, and there are now far higher proportions of women and older workers undertaking apprenticeships and traineeships. What the past six years illustrates most of all is that the underlying concept of an apprenticeship—structured learning in a work-based environment—has made a successful transition and is now well established outside the trades.

Introduction

Information in this publication refers to apprenticeship and traineeship contracts. Apprentices and trainees undertake vocational training through a contract of training. A contract of training is a formal contract between an employer and an apprentice or trainee, whereby the employer agrees to teach the apprentice or trainee a range of skills, and in return, the apprentice or trainee works for a set length of time on a training wage. Prior to the introduction of the New Apprenticeships program, apprentices typically studied at the equivalent of Australian Qualifications Framework (AQF) level III and above for three to four years, with trainees at the equivalent of AQF level I and II for one to two years. Under the New Apprenticeships program the range of industries available to apprentices was expanded to include areas such as technology and communications and tourism and hospitality. School-based apprenticeships and traineeships were also introduced.

Trends and developments in the apprenticeship and traineeship system in Australia to 2000 are discussed in *Australian apprenticeships: Facts, fiction and future* (NCVER 2001). This publication provides further information on apprenticeships and traineeships and detailed information on recent trends in 'traditional apprenticeships'. As the definitions of apprenticeships and traineeships differ between states and territories, a proxy for 'traditional apprenticeships' has been developed.

In this publication 'traditional apprenticeships'¹ are defined as those contracts within the *trades and related workers* occupation group which are at AQF level III qualification or above, with more than two years expected duration for full-time and more than eight years expected duration for part-time or school-based contracts. Using this definition, from 1996, apprenticeships and traineeships are grouped into 'traditional apprenticeships' and 'other'¹ apprenticeships and traineeships.

Growth in training activity

Figure 1 shows the growth in the number of apprenticeships and traineeships in-training over the past two decades. A significant rise in the late 1980s was consistent with the improving Australian economy. This was followed by a decline through the early 1990s, consistent with the recession. Growth in traineeships was slow following their introduction in 1985. Age restrictions were removed in 1992, but this appears to have had little immediate impact. The New Apprenticeships program was introduced in 1998, with changes to the existing apprenticeship system, including employers' choice of training provider and new employer incentives. This stimulated large increases in the numbers in-training, with continued growth from that time.

It can be seen that most of the recent growth for apprenticeships and traineeships has been outside the area of 'traditional apprenticeships' where numbers have been steady since 1996 (figure 1).

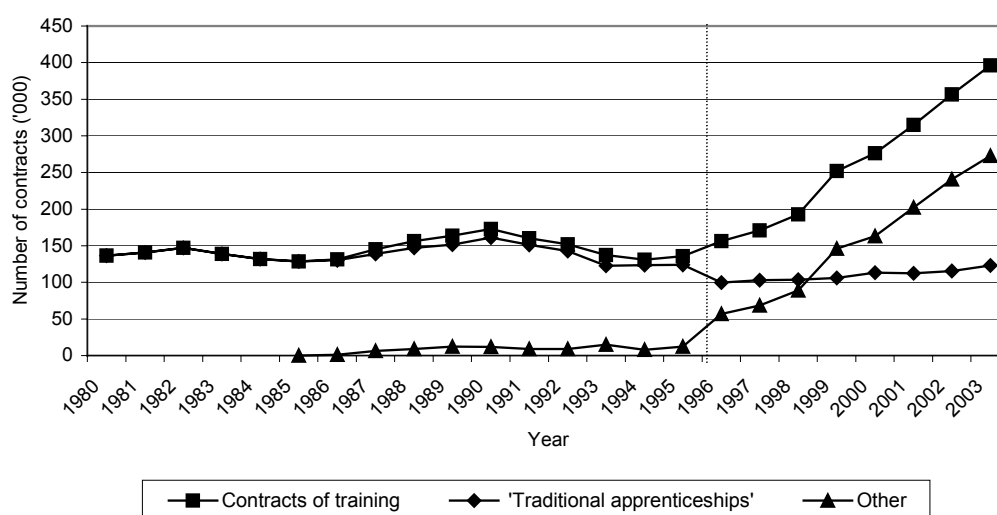


Figure 1: Growth in apprentices and trainees* in-training at 30 June 1980 to 2003

Note: *Prior to 1996, data on apprenticeships and traineeships were obtained from *Australian apprenticeships: Facts, fiction and future* (NCVER 2001, p.14). The delineation between apprenticeships and traineeships at this time was based on Australian Standard Classification of Occupations (ASCO). Refer to endnote for definitions of 'traditional apprenticeships' and 'other'. The definition for 'traditional apprenticeships' differs from that of apprenticeships and traineeships because AQF was not reported at that time.

Source: National Centre for Vocational Education Research (NCVER) Apprentice and Trainee Collection number 36; NCVER (2001)

The decision to employ an apprentice or trainee is influenced by the state of the economy. Apprentices and trainees have increased as a proportion of the Australian employed workforce since 1995 (table 1). During the 1980s, around 2% of the employed workforce were apprentices or trainees. The effect of the recession in the early 1990s can be seen, with the proportion of employed persons who were apprentices or trainees dropping to 1.6% in 1995.

In recent years, more than 3% of the employed workforce were engaged in a contract of training, with 4.2% employed as an apprentice or trainee at 30 June 2003.

Table 1: Growth for apprentices and trainees, 30 June 1980 to 2003

Year	Contracts in-training ('000)*	Employed persons ('000)**	Contracts as proportion of employed persons (%)
1980	136.7	6279.2	2.2
1981	140.8	6424.7	2.2
1982	147.2	6425.2	2.3
1983	138.8	6276.0	2.2
1984	131.9	6506.9	2.0
1985	128.6	6665.4	1.9
1986	131.4	7024.8	1.9
1987	145.3	7142.5	2.0
1988	156.3	7390.6	2.1
1989	163.9	7724.4	2.1
1990	172.8	7915.3	2.2
1991	160.2	7695.7	2.1
1992	151.9	7654.4	2.0
1993	137.5	7686.9	1.8
1994	131.1	7900.1	1.7
1995	135.9	8276.6	1.6
1996	156.5	8356.3	1.9
1997	171.1	8414.6	2.0
1998	192.7	8616.3	2.2
1999	252.2	8806.9	2.9
2000	276.4	9066.0	3.0
2001	314.9	9151.5	3.4
2002	356.5	9323.1	3.8
2003	396.0	9507.5	4.2

Note: *In-training as at 30 June; **employed persons at 30 June from Australian Bureau of Statistics Labour Force Survey data, viewed November 2003, <<http://www.rba.gov.au/Statistics/Bulletin/G07hist.xls>>.

Source: NCVET Apprentice and Trainee Collection number 36; NCVET (2001)

Recent activity

Numbers of contract-of-training commencements, completions and cancellations/withdrawals are reported each quarter. Due to lags in the reporting of information by employers to state and territory training authorities and delays in processing, the numbers of apprentices and trainees in each contract status are estimated and the estimates are revised in subsequent quarters. In addition, there are a number of contracts whose final status is unknown when the contract period has expired.

Commencements

There were 266 800 apprentice and trainee commencements for the 12 months ending 31 December 2002. Of these, 43 400 (16%) were in 'traditional apprenticeships' and 223 400 (84%) were in 'other' apprenticeships and traineeships. Since 1996 'traditional apprenticeships' have increased by 51%, whereas 'other' apprenticeships and traineeships have increased almost four-fold (table 2).

Table 2: Commencements in the 12 months ending December ('000)

	1996	1997	1998	1999	2000	2001	2002
'Traditional apprenticeships'	28.7	30.0	35.2	40.3	38.5	37.6	43.4
Other*	61.1	84.2	119.7	158.2	171.6	190.5	223.4
Total	89.8	114.3	154.9	198.4	210.2	228.0	266.8

Note: *Refer to endnote for definition; totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

Completions

Completion of an apprenticeship or traineeship involves completing both the off-the-job and the on-the-job aspects of training. In addition, the state or territory training authority must record the completion. In 2002, 114 400 completions were reported, of which 18% (21 100) were in 'traditional apprenticeships' (table 3). Similar to commencements, the growth in 'other' apprenticeship and traineeship completions has been much higher than in 'traditional apprenticeships'.

Table 3: Completions in the 12 months ending December ('000)

	1996	1997	1998	1999	2000	2001	2002
'Traditional apprenticeships'	17.6	19.7	21.0	19.5	19.0	19.0	21.1
Other*	18.9	31.6	39.4	54.8	65.4	76.3	93.3
Total	36.6	51.3	60.4	74.4	84.4	95.3	114.4

Note: *Refer to endnote for definition; totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

Cancellations and withdrawals

During the 12 months ending 31 December 2002, there were 100 300 cancellations and withdrawals, of which 18% (18 000) were in the 'traditional apprenticeships' area. This proportion is lower than it was in 1996 (26%), even though the numbers are higher, due to the growth in 'other' apprenticeships and traineeships (table 4).

Table 4: Cancellations and withdrawals in the 12 months ending December ('000)

	1996	1997	1998	1999	2000	2001	2002
'Traditional apprenticeships**	9.6	9.4	13.5	15.9	18.1	19.4	18.0
Other*	27.3	34.0	41.0	57.1	63.9	73.1	82.3
Total	36.9	43.4	54.5	72.9	82.0	92.5	100.3

Note: *Refer to endnote for definition; totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

'Traditional apprenticeships' in-training

Numbers of 'traditional apprenticeships' in-training have been increasing, but at a much slower rate than 'other' apprenticeships and traineeships (table 5), with the proportion of 'traditional apprenticeships' declining from 62.0% in 1996 to 31.3% in 2002. This is to be expected as the apprenticeship and traineeship system has expanded to cover a higher proportion of the labour market. 'Traditional apprenticeships' accounted for 9.8% of all employed persons in the *trades and related workers* occupation group in 2002, compared with 8.9% in 1996.

Table 5: Apprentices and trainees in-training at 31 December ('000)

	1996	1997	1998	1999	2000	2001	2002
'Traditional apprenticeships**	101.3	102.2	102.5	107.9	112.7	110.7	115.4
Other*	62.0	83.3	114.3	147.3	182.2	214.4	253.7
Total	163.3	185.5	216.9	255.2	294.9	325.1	369.1

'Traditional apprenticeships** as a proportion of employed tradespersons** (%)

	8.9	9.1	8.9	9.2	9.4	9.5	9.8
--	-----	-----	-----	-----	-----	-----	-----

Note: *Refer to endnote for definition; **unpublished data from the Australian Bureau of Statistics Labour Force Survey (August), where employed tradespersons are defined as 'trades and related workers'; totals may not add up due to rounding.

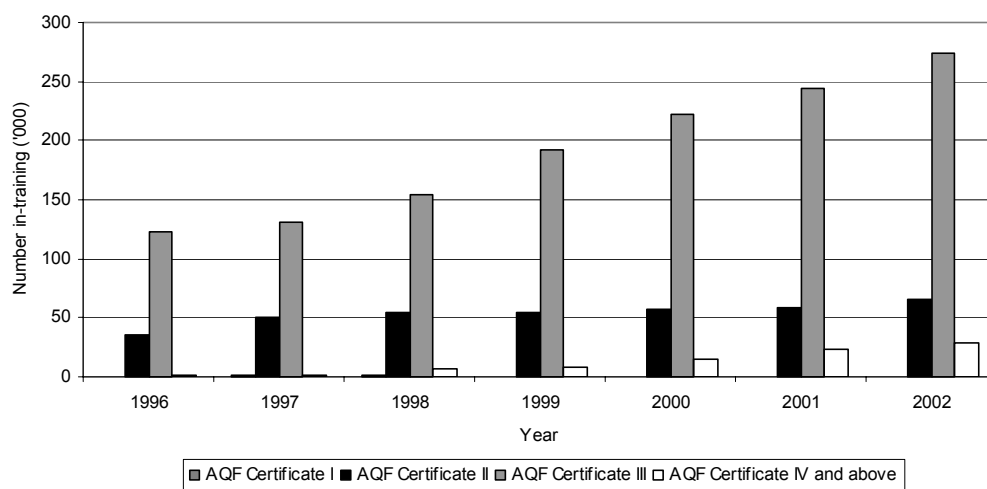
Source: NCVET Apprentice and Trainee Collection number 36

Qualification levels

Most of the growth in all apprenticeships and traineeships has been at AQF level III and above, and for an expected contract duration of between one and three years. The growth has not been at lower-level qualifications (AQF levels I and II) which have a shorter expected contract duration.

AQF level III qualifications have consistently been the most popular qualification level studied since 1996 (figure 2), comprising almost 75% of apprentices and trainees in-training at 31 December 2002 (table 6). Since 1998, the number of apprentices and trainees studying toward an AQF level I has declined (less than 50 in 2002), while the numbers studying for qualifications at higher levels, including diplomas, have increased. There were 28 800 apprentices and trainees studying qualifications at AQF level IV and above in 2002.

Figure 2: Qualifications* of apprentices and trainees in-training at 31 December ('000)



Note: *Where qualification was known.

Source: NCVET Apprentice and Trainee Collection number 36

Almost all 'traditional apprentices' are studying at AQF level III, with 63% of 'other' apprentices and trainees also studying at this level in 2002. Since 1999, the proportion of apprentices and trainees studying at AQF level III has been steady, with the proportions of apprentices and trainees studying at AQF level I and II declining. In 1996, 62% of 'other' apprentices and trainees were studying at AQF level I and II. The proportion of 'other' apprentices and trainees at AQF level III and above has increased from 38% in 1996 to 74% in 2002. Almost 8% of all apprentices and trainees in-training at 31 December 2002 were studying at AQF level IV and above compared with only 1% in 1997 (table 6).

Table 6: Apprentices and trainees in-training at 31 December by qualification* (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS' **							
AQF Certificate I	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AQF Certificate II	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AQF Certificate III	99.9	99.9	99.8	99.5	99.0	98.6	98.6
AQF Certificate IV and above	0.1	0.1	0.2	0.5	1.0	1.4	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER **							
AQF Certificate I	1.0	1.2	1.2	0.3	0.0	0.0	0.0
AQF Certificate II	61.0	61.0	48.2	37.1	31.4	27.5	25.9
AQF Certificate III	36.9	35.6	44.9	57.3	60.9	62.6	63.4
AQF Certificate IV and above	1.0	2.2	5.7	5.3	7.7	9.9	10.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
AQF Certificate I	0.4	0.5	0.6	0.1	0.0	0.0	0.0
AQF Certificate II	22.5	27.1	25.4	21.4	19.4	18.1	17.8
AQF Certificate III	76.7	71.3	70.9	75.2	75.5	74.9	74.4
AQF Certificate IV and above	0.5	1.1	3.1	3.2	5.1	7.0	7.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Percentages based on known total; **refer to endnote for definition.

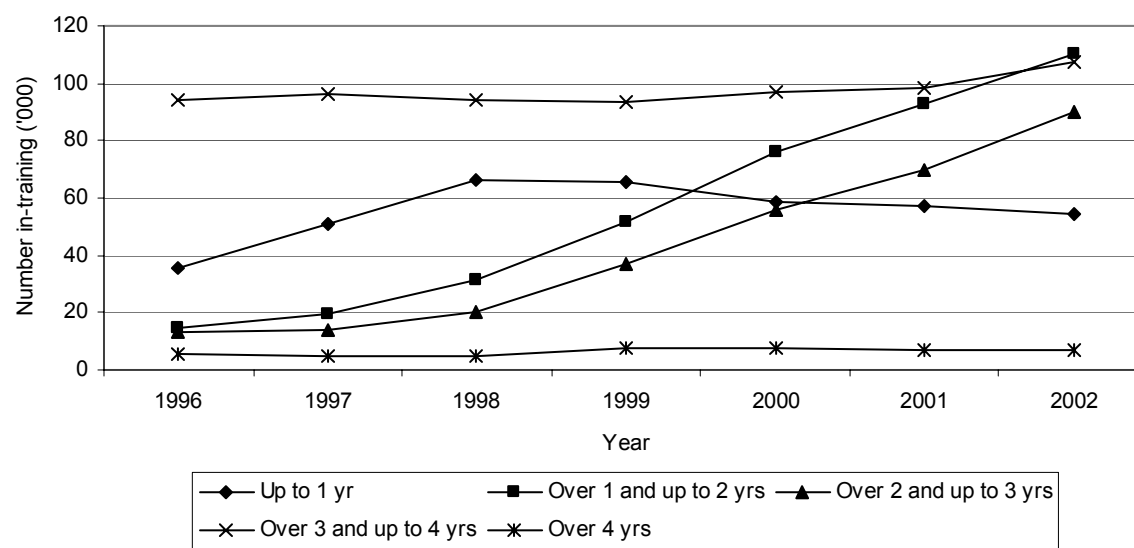
Source: NCVET Apprentice and Trainee Collection number 36

Duration

The number of contracts with expected contract duration greater than four years has remained small and constant. Contracts with an expected duration of up to one year have declined since the introduction of New Apprenticeships in 1998. Prior to 1999 over half of 'other' apprentices and trainees had an expected contract duration of less than one year, whereas in 2002, only 21% of these contracts were of short duration (see figure 3 and table 7).

An expected contract duration of between one and three years is now more common, with a move away from apprenticeships with an expected contract duration of four years and traineeships with an expected contract duration of one year. Contracts with an expected duration of one to two years and two to three years now comprise 29.9% and 24.4% respectively, of all apprentices and trainees in-training (table 7). The numbers of contracts with these expected durations have grown significantly since the introduction of New Apprenticeships in 1998 (figure 3).

Figure 3: Expected duration for apprentices and trainees in-training at 31 December ('000)



Source: NCVET Apprentice and Trainee Collection number 36

Table 7: Apprentices and trainees in-training at 31 December by expected duration (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS**							
Up to 1 year	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Over 1 and up to 2 years	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Over 2 and up to 3 years	11.4	10.9	12.3	15.2	16.7	16.3	15.6
Over 3 and up to 4 years	83.6	84.7	83.3	78.9	78.0	79.4	81.7
Over 4 years	5.0	4.3	4.3	5.9	5.3	4.3	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
Up to 1 year	57.0	60.8	58.0	44.4	32.0	26.7	21.4
Over 1 and up to 2 years	23.3	23.8	27.6	35.2	41.7	43.4	43.5
Over 2 and up to 3 years	3.1	3.4	6.4	14.0	20.3	24.1	28.4
Over 3 and up to 4 years	15.7	11.2	7.5	5.8	5.0	4.8	5.2
Over 4 years	1.0	0.7	0.6	0.7	0.9	1.1	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Up to 1 year	21.7	27.3	30.6	25.6	19.8	17.6	14.7
Over 1 and up to 2 years	8.8	10.7	14.5	20.3	25.8	28.6	29.9
Over 2 and up to 3 years	8.3	7.6	9.2	14.5	19.0	21.4	24.4
Over 3 and up to 4 years	57.8	51.7	43.3	36.7	32.9	30.2	29.1
Over 4 years	3.5	2.7	2.4	2.9	2.6	2.1	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition.

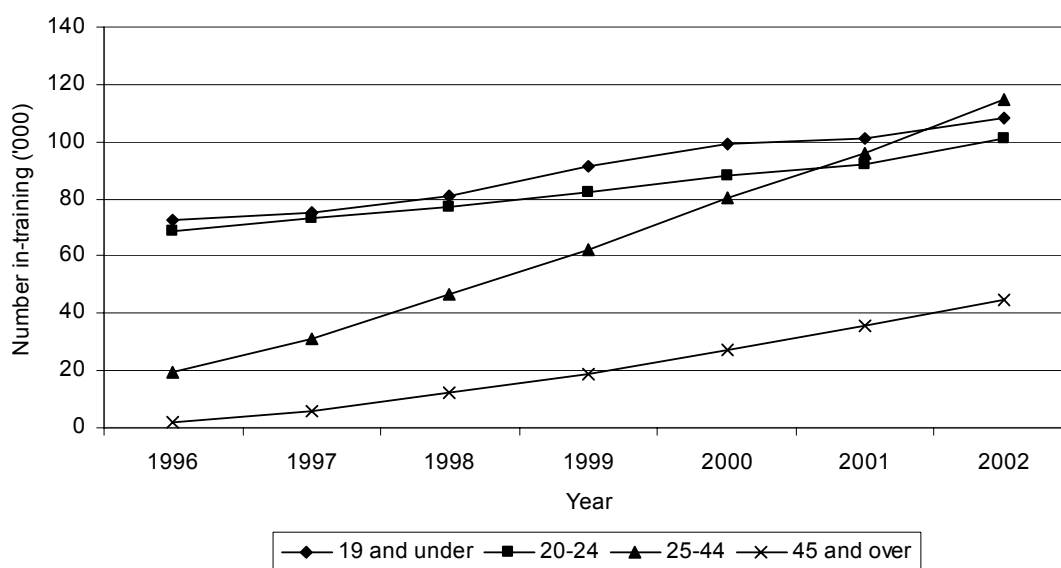
Source: NCVET Apprentice and Trainee Collection number 36

Characteristics of apprentices and trainees

Age

The proportion of older apprentices and trainees has grown since the removal of age restrictions (table 8). The number of apprentices and trainees aged 45 and over has increased at a much higher rate than the number aged 19 and under. Much of this growth has been away from the 'traditional apprenticeships' area, with significant growth for 'other' apprentices and trainees aged 45 and over. However, there has been some change in the age structure of 'traditional apprenticeships', towards persons aged 25 years and over (table 8). All age groups reported record numbers of apprentices and trainees in-training at 31 December 2002 (figure 4). The 25 to 44-year-old age group had the most apprentices and trainees in-training (114 900) at 31 December 2002, followed by those aged 19 years and under (108 400), and those aged 20 to 24 years (101 000).

Figure 4: Apprentices and trainees in-training at 31 December, by age groups ('000)



Source: NCVET Apprentice and Trainee Collection number 36

Table 8: Apprentices and trainees in-training at 31 December by age (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS' *							
Age 19 and under	47.3	46.5	47.8	48.6	47.9	46.0	45.8
Age 20 to 24	45.5	45.5	44.0	42.2	41.6	42.3	41.9
Age 25 to 44	6.9	7.7	7.9	8.7	9.7	10.7	11.3
Age 45 and over	0.3	0.3	0.3	0.5	0.8	1.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
Age 19 and under	40.0	33.4	28.2	26.6	24.8	23.5	21.9
Age 20 to 24	36.8	31.8	27.8	25.0	22.6	21.0	20.7
Age 25 to 44	20.4	27.9	33.7	35.9	38.1	39.3	40.2
Age 45 and over	2.9	6.9	10.3	12.5	14.6	16.2	17.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Age 19 and under	44.5	40.6	37.5	35.9	33.6	31.1	29.4
Age 20 to 24	42.2	39.4	35.5	32.3	29.9	28.3	27.4
Age 25 to 44	12.0	16.7	21.5	24.4	27.2	29.6	31.1
Age 45 and over	1.3	3.3	5.6	7.4	9.3	11.0	12.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition.

Source: NCVET Apprentice and Trainee Collection number 36

The proportion of apprentices and trainees in the employed workforce has increased for all age groups, with 3.8% of the employed workforce being an apprentice or trainee at the end of 2002. In younger age groups, apprentices and trainees made up a larger proportion of employed persons, compared with older age groups (table 9).

Table 9: Apprentices and trainees in-training as a proportion of employed persons at 31 December (percentage)

	1996	1997	1998	1999	2000	2001	2002
Age 15 to 19	11.2	11.5	12.2	12.8	13.6	14.2	14.6
Age 20 to 24	6.7	7.3	7.6	8.0	8.5	8.7	9.4
Age 25 to 44	0.5	0.7	1.1	1.4	1.8	2.1	2.5
Age 45 and over	0.1	0.2	0.4	0.7	0.9	1.2	1.4
Total	1.9	2.1	2.5	2.8	3.2	3.5	3.8

Source: NCVET Apprentice and Trainee Collection number 36; Australian Bureau of Statistics (1996–2002a, table 1)

Teenage employment

About 15% of all 15 to 19-year-old employed persons, were employed as an apprentice or trainee at 31 December 2002 (table 9). For those not in full-time education (apprentices and trainees are not in full-time education), the proportion at 31 December 2002 was 21.5%. More than 36% of teenagers in full-time employment and not in full-time education at 31 December 2002, were employed as a full-time apprentice or trainee. This shows the importance of apprenticeships and traineeships for teenage employment. This proportion has been relatively constant since 1997. In 2002, over three-quarters of teenagers not in full-time education who were employed in *trades and related workers* occupations, were ‘traditional apprentices’ (table 10).

Table 10: Employment rates for teenage apprentices and trainees not in full-time education (percentage)

At 31 Dec.	Full-time apprentices and trainees as a proportion of full-time teenage employment	‘Traditional apprentices’** as a proportion of teenage trade employment**	Trades apprentices and trainees*** as a proportion of teenage trade employment**	Total apprentices and trainees as a proportion of total teenage employment
1996	31.4	67.5	79.3	20.2
1997	34.6	67.5	77.2	21.1
1998	34.9	64.2	72.7	22.4
1999	34.5	63.0	71.7	22.2
2000	35.2	69.6	78.5	23.4
2001	35.8	71.1	79.5	22.5
2002	36.1	76.7	83.5	21.5

Note: *Refer to endnote for definition; **unpublished Australian Bureau of Statistics Labour Force Survey, November, trade employment refers to ‘trades and related workers’; ***apprentices and trainees in the ‘trades and related workers’ occupation category.

Source: NCVET Apprentice and Trainee Collection number 36; Australian Bureau of Statistics (1996–2002b)

Sex

Both males and females in-training have increased in number since 1996, with the percentage of females increasing (table 11). At 31 December 2002, 35.9% of apprentices and trainees in-training were female, up from 20.4% in 1996. There was a small increase for females in ‘traditional apprenticeships’ from 10.8% to 12.0%, whereas for ‘other’ apprentices and trainees, almost half (46.8%) were female in 2002. By comparison, females made up 44.5% of the employed workforce in 2002.

Regions

Over the past seven years the regional distribution of apprentices and trainees has remained unchanged, with the majority residing in capital cities (up to 60% in 2002) and almost 30% in rural areas (table 12). Similar trends were evident across both ‘traditional apprenticeships’ and ‘other’ apprenticeships and traineeships. Although the proportion of apprentices and trainees in-training in remote areas has decreased over time, the numbers have steadily grown from 5800 in 1996 to 8700 in 2002. In 2001, 64% of the Australian population lived in a capital city, followed by 25% in rural areas. Three per cent of the Australian population lived in remote areas, similar to the apprentice and trainee profile.

Table 11: Apprentices and trainees in-training at 31 December by sex (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS' *							
Male	89.2	89.1	89.1	89.0	88.6	88.2	88.0
Female	10.8	10.9	10.9	11.0	11.4	11.8	12.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
Male	63.9	58.5	53.5	55.1	55.2	54.6	53.2
Female	36.1	41.5	46.5	44.9	44.8	45.4	46.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Male	79.6	75.4	70.3	69.4	68.0	66.1	64.1
Female	20.4	24.6	29.7	30.6	32.0	33.9	35.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition.

Source: NCVET Apprentice and Trainee Collection number 36

Table 12: Apprentices and trainees in-training at 31 December by geographic region* (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS' **							
Capital city	58.1	59.1	59.8	59.8	59.9	59.4	58.9
Other metro	8.6	8.4	8.2	8.1	8.0	7.8	8.0
Rural	28.3	27.5	27.4	28.0	28.2	28.6	29.0
Remote	3.3	3.4	3.3	3.1	2.9	2.9	2.9
Interstate	1.7	1.6	1.3	1.1	1.1	1.2	1.2
Total***	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER**							
Capital city	56.8	55.6	56.6	59.9	59.9	59.2	60.4
Other metro	7.4	8.3	7.1	7.3	7.3	7.7	8.0
Rural	30.5	30.8	31.7	29.0	29.1	29.6	28.5
Remote	4.0	4.3	3.6	2.6	2.3	2.2	2.1
Interstate	1.3	1.1	1.0	1.2	1.3	1.3	1.0
Total***	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Capital city	57.6	57.5	58.1	59.8	59.9	59.3	59.9
Other metro	8.1	8.3	7.6	7.6	7.6	7.7	8.0
Rural	29.1	29.0	29.7	28.6	28.8	29.3	28.7
Remote	3.6	3.8	3.4	2.8	2.5	2.5	2.4
Interstate	1.6	1.4	1.2	1.1	1.2	1.3	1.0
Total***	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Geographic region refers to where the apprentice or trainee lives; **refer to endnote for definition; ***includes some 'outside Australia'.

Source: NCVET Apprentice and Trainee Collection number 36

The proportion of apprentices and trainees in each state and territory has changed over time, with the greatest proportion since 1998 residing in Victoria (table 13). In 2002, the greatest proportion of employed persons was in New South Wales (33.0%), with Victoria having the second largest proportion (25.4%). Across other states and territories there was a similar distribution of employed persons and apprentices and trainees. However, the proportion of apprentices and trainees in-training in Western Australia (6.0%) in 2002 was lower than the proportion of employed persons (10.3%). In 2002, New South Wales and Victoria had the largest proportions of 'traditional apprentices' (30.4% and 29.9%, respectively); Victoria also had the largest proportion of 'other' apprentices and trainees (35.5%).

Table 13: Apprentices and trainees in-training at 31 December by states and territories ('000)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS'							
New South Wales	37.7	37.0	35.6	35.6	35.8	34.4	35.0
Victoria	25.9	27.7	29.4	32.1	34.7	33.9	34.5
Queensland	20.0	19.5	18.8	19.6	19.8	19.5	22.1
South Australia	2.3	2.7	3.9	5.7	7.5	8.3	8.5
Western Australia	11.7	11.8	11.1	10.9	10.8	10.3	10.4
Tasmania	2.9	2.7	2.5	2.3	2.2	2.3	2.4
Northern Territory	0.7	0.8	0.8	0.7	0.7	0.6	0.8
Australian Capital Territory	0.0	0.1	0.4	0.9	1.2	1.4	1.7
Australia	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
New South Wales	13.3	16.4	15.5	34.2	49.1	61.4	75.6
Victoria	15.4	17.0	27.5	40.9	56.4	72.5	90.0
Queensland	13.7	25.7	34.1	29.3	30.3	34.5	40.0
South Australia	9.0	11.4	20.5	21.2	25.2	23.4	21.7
Western Australia	5.1	6.6	7.5	8.0	8.3	8.2	11.7
Tasmania	1.8	2.4	5.8	8.4	8.6	10.4	10.7
Northern Territory	1.0	1.2	1.1	1.3	1.5	1.5	1.6
Australian Capital Territory	2.7	2.7	2.4	4.0	2.9	2.5	2.4
Australia	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
New South Wales	51.0	53.3	51.2	69.8	84.9	95.8	110.7
Victoria	41.2	44.6	56.9	73.0	91.0	106.4	124.5
Queensland	33.7	45.2	52.9	48.9	50.1	54.1	62.1
South Australia	11.3	14.1	24.3	26.9	32.7	31.7	30.2
Western Australia	16.8	18.4	18.5	18.8	19.2	18.5	22.1
Tasmania	4.7	5.1	8.4	10.8	10.8	12.7	13.0
Northern Territory	1.8	2.0	1.9	2.0	2.2	2.1	2.3
Australian Capital Territory	2.7	2.8	2.8	4.9	4.1	3.9	4.2
Australia	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition; totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

Employer type

Numbers of apprentices and trainees have grown for all employer types since 1998 (table 14). The majority of apprentices and trainees in 2002 were employed in the private sector, with almost 10% in a group training arrangement and nearly 7% in government employment. While the proportion of apprentices and trainees employed by a group training company has declined slightly since 1998, the numbers have actually grown from 30 400 in 1998 to 35 600 in 2002. The proportion of 'traditional apprentices' employed by a group training company has increased from 13.7% (13 800) in 1996 to 17.4% (20 000) in 2002. The proportion of 'other' apprentices and trainees employed by a group training company declined, despite the numbers almost doubling.

Table 14: Apprentices and trainees in-training at 31 December by employer type ('000)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS'							
Private	82.4	82.9	82.6	86.0	89.0	87.3	90.6
Group training	13.8	15.0	16.4	18.6	20.1	19.1	20.0
Government	4.9	4.3	3.5	3.2	3.6	4.2	4.6
Unknown	0.1	0.0	0.1	0.0	0.1	0.1	0.1
Total	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
Private	48.7	65.9	91.9	118.9	151.8	180.6	216.6
Group training	8.0	10.4	14.0	16.7	16.6	15.6	15.6
Government	5.3	6.9	8.2	10.8	13.0	17.2	20.6
Unknown	0.1	0.2	0.2	1.0	0.9	1.0	1.0
Total	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Private	131.1	148.8	174.5	204.9	240.7	267.9	307.2
Group training	21.8	25.3	30.4	35.3	36.7	34.7	35.6
Government	10.2	11.2	11.7	14.0	16.5	21.4	25.2
Unknown	0.1	0.2	0.3	1.0	0.9	1.1	1.0
Total	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition; totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

Apprentices and trainees and employment

Full-time/part-time apprenticeships and traineeships

The number of part-time apprentices and trainees has increased in recent years. Part-time apprentices and trainees accounted for almost a quarter of those in-training at 31 December 2002 (table 15). This includes a small percentage in school-based apprenticeships, which were introduced in 1999. Over a third of all 'other' apprentices and trainees were working part time and in a part-time or school-based apprenticeship or traineeship in 2002.

Table 15: Apprentices and trainees in-training at 31 December by employment status (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS'							
Full-time	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Part-time (inc. school-based)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
Full-time	95.5	91.2	83.7	77.0	72.8	68.9	66.0
Part-time (inc. school-based)	4.5	8.8	16.3	23.0	27.2	31.1	34.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Full-time	98.3	96.1	91.4	86.7	83.2	79.5	76.6
Part-time (inc. school-based)	1.7	3.9	8.6	13.3	16.8	20.5	23.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition.

Source: NCVET Apprentice and Trainee Collection number 36

There has also been an increase in part-time apprentices and trainees as a percentage of part-time employed persons (3.2% at 31 December 2002). All apprentices and trainees in-training at 31 December 2002 made up 3.8% of the employed labour force (table 16).

Table 16: Apprentices and trainees as a proportion of full-time/part-time employed persons (percentage)

	1996	1997	1998	1999	2000	2001	2002
Full-time	2.5	2.8	3.0	3.3	3.6	3.8	4.1
Part-time	0.1	0.3	0.8	1.4	2.1	2.6	3.2
Total	1.9	2.1	2.5	2.8	3.2	3.5	3.8

Source: NCVET Apprentice and Trainee Collection number 36; Australian Bureau of Statistics (1996–2002a, table 1)

Sex

At 31 December 2002, females made up two-thirds (66.6%) of part-time apprentices and trainees (excluding school-based) and males made up 73% of full-time apprentices and trainees. At 31 December 2002, females accounted for 34.1% of full-time employed persons and 71.4% of part-time employed persons.

The majority of female apprentices and trainees employed part time have been employed in the *intermediate clerical, sales and service workers* occupation group (table 17). They tend to be older workers, with 20 500 (40.0%) in the 25 to 44-year-old age group in 2002. The total number of female part-time apprentices and trainees has increased dramatically, from only 900 in 1996 to 51 200 at 31 December 2002.

Male apprentices and trainees employed part time are also common in these occupations and age groups (table 18), with 11 800 in *intermediate clerical, sales and service workers* and 9000 aged 25 to 44 years old. The total number has increased from 1900 in 1996 to 25 600 in 2002, a substantially less increase than that of female apprentices and trainees employed part time.

Table 17: Female apprentices and trainees, part-time, at 31 December ('000)

	1996	1997	1998	1999	2000	2001	2002
OCCUPATION							
Managers and administrators	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Professionals	0.0	0.4	0.4	0.6	0.7	0.8	0.9
Associate professionals	0.2	0.5	0.5	0.2	0.4	1.1	3.4
Trades and related workers	0.3	0.3	0.4	0.5	0.7	0.9	1.0
Advanced clerical and service workers	0.0	0.0	0.0	0.0	0.7	1.9	2.9
Intermediate clerical, sales and service workers	0.3	3.2	8.3	13.9	20.6	27.8	33.5
Intermediate production and transport workers	0.0	0.0	0.0	0.2	0.4	0.7	1.0
Elementary clerical, sales and service workers	0.0	0.2	2.4	2.3	2.6	2.7	3.5
Labourers and related workers	0.0	0.2	1.0	3.1	3.9	4.5	4.8
Total	0.9	4.7	13.0	20.9	29.9	40.5	51.2
AGE							
Age 19 and under	0.3	0.9	2.8	3.9	6.7	9.6	10.6
Age 20–24	0.3	0.6	2.0	3.5	5.2	7.0	9.5
Age 25–44	0.3	2.1	5.4	9.0	12.2	16.0	20.5
Age 45 and over	0.0	1.1	2.8	4.4	5.8	7.9	10.6
Total	0.9	4.7	13.0	20.9	29.9	40.5	51.2

Note: Totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

Table 18: Male apprentices and trainees, part-time, at 31 December ('000)

	1996	1997	1998	1999	2000	2001	2002
OCCUPATION							
Managers and administrators	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Professionals	0.0	0.0	0.1	0.1	0.1	0.2	0.2
Associate professionals	0.1	0.1	0.3	0.1	0.2	0.5	0.8
Trades and related workers	1.5	1.3	1.2	0.8	0.8	0.9	1.0
Advanced clerical and service workers	0.0	0.0	0.0	0.0	0.1	0.2	0.3
Intermediate clerical, sales and service workers	0.1	0.6	1.6	3.9	6.8	9.8	11.8
Intermediate production and transport workers	0.0	0.0	0.1	0.6	1.3	2.0	2.3
Elementary clerical, sales and service workers	0.0	0.1	1.3	2.7	3.8	3.8	4.5
Labourers and related workers	0.1	0.5	1.2	2.3	3.4	3.9	4.6
Total	1.9	2.6	5.6	10.6	16.5	21.2	25.6
AGE							
Age 19 and under	0.6	0.8	2.1	2.4	4.1	6.0	6.6
Age 20–24	1.1	1.1	1.6	2.7	3.9	4.9	6.5
Age 25–44	0.3	0.5	1.5	3.9	6.0	7.3	9.0
Age 45 and over	0.0	0.1	0.5	1.6	2.5	3.0	3.6
Total	1.9	2.6	5.6	10.6	16.5	21.2	25.6

Note: Totals may not add up due to rounding.

Source: NCVET Apprentice and Trainee Collection number 36

Occupations

The occupational distribution of apprentices and trainees now reflects a broader occupational distribution (table 19). In 2002, following *trades and related workers*, the *intermediate clerical, sales and service workers* had the greatest proportion of apprentices and trainees (27.4%).

In 2002, 87% of all apprentices and trainees in the *trades and related workers* occupation group were in a 'traditional apprenticeship'. The most common trades occupation sub-groups employing a 'traditional apprentice' were *construction tradespersons* (28 700) and *automotive tradespersons* (20 400), with only a small number of 'other' apprentices and trainees in these areas (2300 and 2200, respectively). All 'traditional apprenticeship' occupations have increased in absolute numbers over the period 1996 to 2002, with the exception of *mechanical and fabrication engineering tradespersons*.

Professionals and *associate professionals* made up 30.5% of the employed workforce in 2002, but only 7.7% of apprentices and trainees were in these occupations at 31 December 2002 (table 19).

While *trades and related workers* accounted for 36.0% of all apprentices and trainees, they comprised only 12.6% of the employed workforce in 2002.

Apprentices and trainees in the *trades and related workers* occupation have, since 1996, consistently accounted for around 11% of employed persons in that occupation. Within the trades, the proportion of *mechanical and fabrication engineering tradespersons* has declined, with proportions in *automotive; electrical and electronics; and other tradespersons* remaining steady (table 20). The proportion of apprentices and trainees to employed persons has increased in all other major occupational groups, with the exception of *managers and administrators*.

Table 19: Apprentices and trainees in-training at 31 December by occupation (percentage)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS'*							
<i>Tradespersons (not further defined)</i>	0.0	0.0	0.0	0.0	0.1	0.2	0.4
<i>Mechanical and fabrication engineering tradespersons</i>	18.4	18.4	17.5	15.4	13.5	12.8	12.4
<i>Automotive tradespersons</i>	18.0	17.6	18.0	17.9	17.9	18.0	17.6
<i>Electrical and electronics tradespersons</i>	13.9	14.5	13.8	14.0	14.1	14.2	14.0
<i>Construction tradespersons</i>	20.5	20.0	21.0	23.0	24.3	24.1	24.9
<i>Food tradespersons</i>	12.1	12.9	13.0	11.9	11.6	11.8	12.3
<i>Skilled agricultural and horticultural workers</i>	2.8	2.8	2.8	3.7	4.1	4.1	3.8
<i>Other tradespersons and related workers</i>	14.2	13.8	13.8	14.0	14.4	14.7	14.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	101.3	102.2	102.5	107.9	112.7	110.7	115.4
OTHER*							
Managers and administrators	4.2	3.2	2.0	1.1	0.6	0.4	0.5
Professionals	0.6	1.6	1.2	1.1	1.1	1.0	1.0
Associate professionals	6.0	7.1	5.6	4.5	5.5	6.3	10.1
Trades and related workers	34.9	24.6	18.9	15.2	11.7	9.4	6.9
<i>Tradespersons (not further defined)</i>	0.0	0.0	0.0	0.1	0.1	0.0	0.0
<i>Mechanical and fabrication engineering tradespersons</i>	3.5	2.3	2.0	1.6	1.0	0.7	0.5
<i>Automotive tradespersons</i>	7.8	6.2	4.5	3.1	2.0	1.4	0.9
<i>Electrical and electronics tradespersons</i>	3.2	2.0	1.4	1.0	0.7	0.5	0.4
<i>Construction tradespersons</i>	6.7	4.5	2.6	2.0	1.5	1.2	0.9
<i>Food tradespersons</i>	6.4	4.3	4.7	3.6	3.3	2.9	2.1
<i>Skilled agricultural and horticultural workers</i>	0.6	0.5	0.3	0.6	0.6	0.8	0.7
<i>Other tradespersons and related workers</i>	6.6	4.9	3.5	3.2	2.5	1.9	1.5
Advanced clerical and service workers	0.4	0.2	0.1	0.2	1.5	4.1	3.5
Intermediate clerical, sales and service workers	30.8	33.8	35.6	39.9	39.6	40.4	39.9
Intermediate production and transport workers	3.1	3.8	4.0	10.6	16.6	18.7	18.4
Elementary clerical, sales and service workers	9.6	10.5	17.4	13.0	9.3	6.8	7.0
Labourers and related workers	10.5	15.3	15.2	14.4	14.1	12.9	12.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	62.0	83.3	114.3	147.3	182.2	214.4	253.7
TOTAL							
Managers and administrators	1.6	1.4	1.0	0.6	0.4	0.2	0.3
Professionals	0.2	0.7	0.6	0.7	0.7	0.7	0.7
Associate professionals	2.3	3.2	3.0	2.6	3.4	4.1	7.0
Trades and related workers	75.3	66.1	57.2	51.0	45.4	40.3	36.0
<i>Tradespersons (not further defined)</i>	0.0	0.0	0.0	0.1	0.1	0.1	0.1
<i>Mechanical and fabrication engineering tradespersons</i>	12.7	11.2	9.3	7.4	5.8	4.8	4.2
<i>Automotive tradespersons</i>	14.2	12.5	10.8	9.3	8.1	7.0	6.1
<i>Electrical and electronics tradespersons</i>	9.8	8.9	7.3	6.5	5.8	5.2	4.6
<i>Construction tradespersons</i>	15.2	13.0	11.3	10.9	10.2	9.0	8.4
<i>Food tradespersons</i>	10.0	9.0	8.6	7.1	6.4	5.9	5.2
<i>Skilled agricultural and horticultural workers</i>	2.0	1.8	1.5	1.9	1.9	1.9	1.7
<i>Other tradespersons and related workers</i>	11.3	9.8	8.4	7.8	7.1	6.2	5.6
Advanced clerical and service workers	0.1	0.1	0.1	0.1	0.9	2.7	2.4
Intermediate clerical, sales and service workers	11.7	15.2	18.8	23.0	24.5	26.7	27.4
Intermediate production and transport workers	1.2	1.7	2.1	6.1	10.2	12.3	12.7
Elementary clerical, sales and service workers	3.7	4.7	9.2	7.5	5.7	4.5	4.8
Labourers and related workers	4.0	6.9	8.0	8.3	8.7	8.5	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total ('000)	163.3	185.5	216.9	255.2	294.9	325.1	369.1

Note: *Refer to endnote for definition.

Source: NCVET Apprentice and Trainee Collection number 36

Table 20: Apprentices and trainees as a proportion of employed persons by occupation (percentage)

	1996	1997	1998	1999	2000	2001	2002
Managers and administrators	0.4	0.4	0.4	0.3	0.2	0.1	0.2
Professionals	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Associate professionals	0.4	0.7	0.7	0.7	1.0	1.3	2.4
Trades and related workers*	10.8	10.9	10.8	11.1	11.2	11.2	11.3
<i>Mechanical and fabrication engineering tradespersons</i>	10.2	10.0	9.9	9.5	8.0	7.8	7.9
<i>Automotive tradespersons</i>	16.8	16.9	17.6	17.6	18.6	16.1	16.3
<i>Electrical and electronics tradespersons</i>	9.1	9.2	8.9	9.0	9.4	10.1	9.1
<i>Construction tradespersons</i>	9.2	10.1	9.0	9.8	10.2	10.2	11.3
<i>Food tradespersons</i>	18.6	19.7	22.3	19.7	20.8	21.0	25.3
<i>Skilled agricultural and horticultural workers</i>	4.6	4.7	5.0	6.6	8.5	8.3	7.5
<i>Other tradespersons and related workers</i>	9.6	8.8	8.5	9.9	9.5	10.3	9.8
Advanced clerical and service workers	0.1	0.1	0.0	0.1	0.7	2.2	2.3
Intermediate clerical, sales and service workers	1.4	2.1	2.8	3.9	4.7	5.5	6.4
Intermediate production and transport workers	0.2	0.4	0.6	2.0	3.9	5.0	5.9
Elementary clerical, sales and service workers	0.7	1.0	2.3	2.2	1.9	1.6	1.9
Labourers and related workers	0.8	1.5	2.0	2.4	2.9	3.3	3.6
Total	2.0	2.2	2.5	2.9	3.3	3.6	4.0

Note: *The proportions have been calculated after pro-rating the number of 'tradespersons not further defined' amongst other trades occupations.

Source: NCVET Apprentice and Trainee Collection number 36; Australian Bureau of Statistics labour force unpublished data, August 1996–2002

Industries

The largest industries employing apprentices and trainees at 31 December 2002 were retail trade (20.0%), property and business services (14.8%), and manufacturing (12.3%) (table 21). These three industries were also the largest employers in 2002. Construction (24.4%) was the largest industry employing 'traditional apprentices', followed by retail trade (15.3%), manufacturing (14.8%), and property and business services (14.7%). Retail trade; property and business services; and manufacturing were also the largest industries employing 'other' apprentices and trainees (table 21).

The industries where apprentices and trainees were most prominent as a proportion of employed persons in 2002 were transport and storage (7.1%), accommodation, cafes and restaurants (6.0%), retail trade (5.3%), and property and business services (5.2%) (table 22). There was only a small proportion of apprentices and trainees in-training in the education (1.1%) industry.

Table 21: Apprentices and trainees in-training at 31 December by industry* (percentage)

	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS'***				
Agriculture, forestry & fishing	0.9	1.0	1.2	1.1
Mining	0.8	0.7	0.6	0.6
Manufacturing	14.4	14.1	14.6	14.8
Electricity, gas & water supply	1.7	1.6	1.6	1.5
Construction	20.2	22.3	23.2	24.4
Wholesale trade	1.0	1.0	1.1	1.1
Retail trade	15.0	15.0	15.4	15.3
Accommodation, cafes & restaurants	5.1	5.1	5.2	5.5
Transport & storage	1.8	1.7	1.7	1.8
Communication services	0.1	0.2	0.2	0.1
Finance & insurance	0.0	0.1	0.1	0.1
Property & business services	13.8	14.5	14.4	14.7
Government administration & defence	1.7	1.9	2.6	3.0
Education	1.7	1.7	1.5	1.4
Health & community services	0.3	0.3	0.4	0.3
Cultural & recreational services	0.6	0.6	0.6	0.5
Personal & other services	7.0	7.5	7.9	8.1
Unknown	14.1	10.7	7.8	5.6
Total	100.0	100.0	100.0	100.0
Total ('000)	107.9	112.7	110.7	115.4
OTHER**				
Agriculture, forestry & fishing	2.0	1.6	2.0	1.9
Mining	0.2	0.3	0.6	0.5
Manufacturing	11.7	12.1	11.1	11.2
Electricity, gas & water supply	0.6	0.4	0.4	0.3
Construction	3.5	3.1	2.9	2.9
Wholesale trade	1.9	2.0	2.2	2.3
Retail trade	19.5	19.3	21.2	22.1
Accommodation, cafes & restaurants	7.6	8.3	8.3	8.0
Transport & storage	5.9	9.8	10.8	10.1
Communication services	1.8	2.5	1.9	2.3
Finance & insurance	1.8	2.5	2.9	3.0
Property & business services	20.0	16.9	15.3	14.8
Government administration & defence	4.3	3.9	4.6	4.5
Education	2.5	2.0	2.1	2.3
Health & community services	6.7	6.5	6.5	7.4
Cultural & recreational services	1.8	2.0	1.5	1.4
Personal & other services	4.6	4.0	3.4	2.9
Unknown	3.7	2.8	2.3	2.1
Total	100.0	100.0	100.0	100.0
Total ('000)	147.3	182.2	214.4	253.7

	1999	2000	2001	2002
TOTAL				
Agriculture, forestry & fishing	1.5	1.4	1.7	1.6
Mining	0.4	0.4	0.6	0.5
Manufacturing	12.8	12.9	12.3	12.3
Electricity, gas & water supply	1.0	0.9	0.8	0.7
Construction	10.6	10.5	9.8	9.7
Wholesale trade	1.5	1.6	1.8	1.9
Retail trade	17.6	17.7	19.2	20.0
Accommodation, cafes & restaurants	6.6	7.1	7.2	7.2
Transport & storage	4.1	6.7	7.7	7.5
Communication services	1.1	1.6	1.3	1.6
Finance & insurance	1.1	1.5	1.9	2.1
Property & business services	17.4	16.0	15.0	14.8
Government administration & defence	3.2	3.1	3.9	4.0
Education	2.2	1.9	1.9	2.0
Health & community services	4.0	4.1	4.4	5.2
Cultural & recreational services	1.3	1.4	1.2	1.1
Personal & other services	5.6	5.3	4.9	4.5
Unknown	8.1	5.8	4.2	3.2
Total	100.0	100.0	100.0	100.0
Total('000)	255.2	294.9	325.1	369.1

Note: *Prior to 1999 there were a large number of unknowns which can distort the proportion of apprentices and trainees within industries; **refer to endnote for definition.

Source: NCVET Apprentice and Trainee Collection number 36

Table 22: Apprentices and trainees in-training as a proportion of employed persons by industry* (percentage)

	1999	2000	2001	2002
Agriculture, forestry & fishing	1.0	1.0	1.3	1.7
Mining	1.5	1.6	2.4	2.2
Manufacturing	3.3	3.6	3.8	4.1
Electricity, gas & water supply	4.5	3.9	4.0	3.5
Construction	4.2	4.8	4.7	5.1
Wholesale trade	0.8	1.2	1.4	1.7
Retail trade	3.7	4.1	4.7	5.3
Accommodation, cafes & restaurants	4.1	4.6	5.4	6.0
Transport & storage	2.9	5.0	6.2	7.1
Communication services	1.8	2.8	2.8	3.7
Finance & insurance	0.9	1.5	1.9	2.3
Property & business services	4.9	4.6	5.0	5.2
Government administration & defence	2.6	2.7	3.5	3.5
Education	1.0	1.0	1.0	1.1
Health & community services	1.3	1.5	1.7	2.1
Cultural & recreational services	1.7	2.0	1.8	1.8
Personal & other services	4.4	5.0	4.5	4.5
Total	2.9	3.3	3.5	3.9

Note: *The proportions have been calculated after pro-rating the number of apprentices and trainees whose industry was not known amongst other industry groups.

Source: NCVET Apprentice and Trainee Collection number 36; Australian Bureau of Statistics (1999–2002)

Occupation by industry

Over a third (132 900) of all apprentices and trainees in-training at 31 December 2002 were in the *trades and related workers* occupation (see table 23). In particular, there were large proportions of *trades and related workers* in the construction (85.3%); electricity, gas and water supply (74.0%); and personal and other services (66.5%) industries.

Two in five of all employed persons in the retail trade industry were employed in the *elementary clerical, sales and service workers* occupation, compared with only 10% of apprentices and trainees in-training at 31 December 2002. Two-thirds of employed persons in *elementary clerical, sales and service workers* were employed in the retail trade industry, but only 42% of apprentices and trainees in this occupation were in the retail trade industry. Another 32% of *elementary clerical, sales and service workers* were in the property and business services industry.

Table 23: Apprentices and trainees in-training at 31 December 2002, by occupation (ASCO) and industry (ANZSIC) ('000)

	Managers and administrators	Professionals	Associate professionals	Trades and related workers	Advanced clerical and service	Int. clerical, sales and service	Int. production & transport	Elem. clerical, sales and service	Labourers and related workers	ASCO total
Agriculture, forestry & fishing	0.3	0.0	0.1	2.0	0.0	0.2	0.8	0.0	2.5	6.0
Mining	0.0	0.0	0.2	0.8	0.0	0.1	0.5	0.0	0.4	1.9
Manufacturing	0.1	0.1	2.1	21.4	0.2	2.6	8.7	0.4	9.7	45.4
Electricity, gas & water supply	0.0	0.0	0.2	1.8	0.0	0.1	0.1	0.1	0.1	2.5
Construction	0.0	0.0	0.5	30.4	0.1	0.7	2.8	0.2	0.9	35.6
Wholesale trade	0.1	0.0	0.5	1.6	0.1	1.0	2.8	0.3	0.9	7.2
Retail trade	0.3	0.1	4.8	19.7	0.3	35.3	3.4	7.5	2.3	73.7
Accommodation, cafes & restaurants	0.1	0.0	1.0	8.0	0.1	16.6	0.0	0.5	0.4	26.7
Transport & storage	0.0	0.1	0.9	2.3	0.6	2.5	18.1	0.5	2.9	27.8
Communication services	0.0	0.0	0.6	0.2	0.3	2.8	0.9	1.2	0.0	5.9
Finance & insurance	0.0	0.0	0.6	0.1	4.8	1.9	0.0	0.3	0.0	7.8
Property & business services	0.2	0.5	5.9	19.2	1.4	10.0	2.8	5.7	8.8	54.5
Government administration & defence	0.1	0.3	1.9	3.8	0.4	4.0	3.6	0.1	0.7	14.8
Education	0.0	0.2	1.1	1.9	0.3	3.1	0.1	0.2	0.5	7.4
Health & community services	0.0	0.9	2.5	0.8	0.1	13.6	0.2	0.2	0.6	19.1
Cultural & recreational services	0.0	0.1	0.7	0.8	0.0	2.0	0.0	0.1	0.3	4.1
Personal & other services	0.0	0.1	1.1	11.1	0.2	2.6	0.6	0.5	0.6	16.7
Unknowns	0.0	0.1	0.9	6.9	0.1	2.2	1.3	0.1	0.3	11.9
ANZSIC total	1.3	2.5	25.7	132.9	9.0	101.2	46.7	17.8	32.0	369.1

Note: ASCO – Australian Standard Classification of Occupations; ANZSIC – Australian and New Zealand Standard Industrial Classification; totals may not add up due to rounding.

Source: NCVER Apprentice and Trainee Collection number 36

While 34.9% of apprentices and trainees in the *intermediate clerical, sales and service workers* occupation were employed in the retail trade industry, only 7.2% of employed persons in this occupation were in retail trade.

Comparable information of occupation by industry for ‘traditional apprenticeships’ is available in table 21, where all ‘traditional apprenticeships’ are in the *trades and related workers* occupation group.

Table 24 shows apprentices and trainees as a proportion of employed persons by occupation and industry. Apprentices and trainees comprise 51% of *trades and related workers* in the property and business services industry. Almost a third in each of *trades and related workers* in the accommodation, cafes and restaurants industry, and *intermediate clerical, sales and service workers* in the retail trade industry, are apprentices and trainees (32.4% and 30.5%, respectively).

Table 24: Apprentices and trainees in-training as a proportion of employed persons*, occupation by industry, 2002 (percentage)

	Managers and administrators	Professionals	Associate professionals	Trades and related workers	Advanced clerical and service	Int. clerical, sales and service	Int. production & transport	Elem. clerical, sales and service	Labourers and related workers	ASCO total
Agriculture, forestry & fishing	0.2	0.1	1.2	14.1	0.2	2.5	3.6	**3.6	2.6	1.7
Mining	0.0	0.0	3.2	4.2	**0.6	**1.7	1.5	**0.5	**22.4	2.2
Manufacturing	0.1	0.1	3.5	7.5	0.6	2.2	4.2	2.2	5.4	4.1
Electricity, gas & water supply	0.1	0.0	1.9	10.3	**1.0	1.0	**3.5	**4.9	**3.0	3.5
Construction	0.1	0.2	1.4	8.7	0.2	2.0	4.2	**9.7	1.0	5.1
Wholesale trade	0.1	0.0	1.3	4.3	0.3	0.8	4.5	1.1	3.5	1.7
Retail trade	1.7	0.4	2.2	11.6	0.8	30.5	3.7	1.2	2.4	5.3
Accommodation, cafes & restaurants	**1.9	0.2	0.8	32.4	1.3	9.8	**0.6	1.2	0.5	6.0
Transport & storage	0.1	0.2	4.8	11.8	3.4	3.4	9.6	2.4	20.7	7.1
Communication services	0.0	0.1	2.7	0.8	**21.6	12.0	3.5	3.4	**1.4	3.7
Finance & insurance	0.0	0.0	0.7	**27.4	9.0	1.6	**0.7	5.6	**0.8	2.3
Property & business services	0.4	0.1	4.0	51.4	1.5	8.3	13.8	8.8	7.2	5.2
Government administration & defence	0.2	0.3	3.3	21.2	2.0	3.0	22.3	0.4	4.0	3.5
Education	0.1	0.1	4.1	16.9	1.5	2.7	**3.8	1.1	3.1	1.1
Health & community services	0.2	0.2	2.3	5.9	0.7	4.4	2.2	1.4	0.9	2.1
Cultural & recreational services	0.3	0.1	1.7	6.0	**0.5	3.4	**2.4	0.5	3.4	1.8
Personal & other services	0.1	0.2	1.6	14.7	1.6	3.8	2.8	1.8	1.2	4.5
ANZSIC total	0.2	0.1	2.3	11.2	2.2	6.2	5.9	1.8	3.6	3.9

Note: *Number of apprentices and trainees in-training at 31 December 2002 divided by the number of employed persons in November 2002, by occupation and industry. The proportions have been calculated after pro-rating the number of apprentices and trainees whose industry was not known amongst other industry groups, within the occupation group; **Treat with caution, as the Australian Bureau of Statistics estimated number of employed persons have standard errors greater than 25%.

ASCO – Australian Standard Classification of Occupations; ANZSIC – Australian and New Zealand Standard Industrial Classification.

Source: NCVET Apprentice and Trainee Collection number 36; Australian Bureau of Statistics (2002)

References

- Australian Bureau of Statistics 1996–2002a, *Labour force, Australia*, detailed – electronic delivery, cat.no.6291.0.55.001, ABS, Canberra.
- 1996–2002b, *Labour force, Australia*, cat.no.6203.0, December, ABS, Canberra.
- 1999–2002 *Labour force, Australia*, cat.no.6203.0, November, ABS, Canberra.
- 2002, *Labour force, Australia*, cat.no.6203.0, November, ABS, Canberra.
- NCVER (National Centre for Vocational Education Research) 2001, *Australian apprenticeships: Facts, fiction and future*, NCVER, Adelaide.

Endnote

- 1 'Traditional apprenticeships' in this publication are defined as those contracts within the trades and related workers occupation group which are at AQF III qualification or above, with more than two years expected duration for full-time, or more than eight years expected duration for part-time or school-based contracts. The category referred to as 'other' apprenticeships and traineeships includes all other contracts which do not meet the criteria for the 'traditional apprenticeships' definition above.



Level 11, 33 King William Street
Adelaide SA 5000

PO Box 8288 Station Arcade
South Australia 5000

Tel (08) 8230 8400
Fax (08) 8212 3436
Web www.ncver.edu.au
Email ncver@ncver.edu.au

ISBN | 920895 33 7 print edition

ISBN | 920895 34 5 web edition