Trends in 'traditional apprenticeships'

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Abstract

This paper analyses the trends in traditional apprenticeships since 1996. The definition of a 'traditional apprentice' used in this report is 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. Trends in 'traditional apprenticeship' contracts are compared to trends in other contracts. Characteristics of all apprentices and trainees in-training are also examined.

The study found that growth in the apprenticeship and traineeship system in the past six years has been mostly outside of 'traditional apprenticeships'. 'Traditional apprenticeship' numbers have grown slightly over the period with growth in most trade occupations.

The analysis concludes that 'traditional apprenticeships' were mostly undertaken by younger males, at Australian Qualifications Framework (AQF) level III and full-time. While other apprenticeships and traineeships were more likely to be undertaken by older females working part-time.

There has been growth in the overall participation rate of apprentices and trainees as a proportion of employed persons, from 2% in 1996 to 4% in 2002. However the proportion in the *trades and related workers* occupations has been consistently around 11% over the period. There is also a high proportion of teenagers in trade employment who are studying 'traditional apprenticeships'. The proportion is also significant for full-time teenage employment.

Introduction

This paper is based on the publication *Trends in 'traditional apprenticeships'* (Brooks 2004), focusing on the key findings of the report. Information in this paper refers to apprenticeship and traineeship contracts, rather than individuals. This report provides a statistical portrait of 'traditional apprenticeships', as they have been the focus of much attention in recent times.

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 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 (Brooks 2004, p.6-8).

Research Method

In the national apprentice and trainee collection information is not collected separately for apprentices and trainees, due to differing definitions across states and territories. Because of these differences a proxy for 'traditional apprenticeships' has been developed. The definition of 'traditional apprenticeships' is 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. 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.

This definition is used throughout the paper. Proportions and changes over time are presented in tabular form. Analysis of apprentices and trainees in total is also included.

Findings and Discussion

Numbers in-training

The total number of apprentices and trainees in-training rose from 163 300 in December 1996 to 369 100 in December 2002, while the number of 'traditional apprenticeships' in-training increased from 101 300 to 115 400. This means that 'traditional apprenticeships' accounted for only 7% of the total growth in apprenticeships and traineeships (table 1). Because of the relatively small growth in 'traditional apprenticeships' the proportion of the total has declined from 62.0% in 1996 to 31.3% in 2002.

Table 1: 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

Note: Totals may not add up due to rounding.

Source: Brooks 2004, p.12.

Contracts

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. AQF level III qualifications have consistently been the most popular qualification level studied since 1996, comprising almost 75% of apprentices and trainees intraining at 31 December 2002 (Brooks 2004, p.12). Since 1999, the proportions of apprentices and trainees studying at AQF level I and II have declined. 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 (Brooks 2004, p.13).

The number of contracts with expected contract duration greater than four years has remained small and constant over the period. Contracts with an expected duration of up to one year have declined since the introduction of New Apprenticeships in 1998. 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 (Brooks 2004, p.14-15).

Almost all (98.6%) 'traditional apprentices' are studying at AQF level III, with 63.4% of 'other' apprentices and trainees also studying at this level in 2002. The majority of 'traditional apprenticeships' had an expected contract duration of between three and four years over the 1996 to 2002 period (81.7% in 2002) (Brooks 2004, p.14-15).

Characteristics of apprentices and trainees

The proportion of older apprentices and trainees has grown since the removal of age restrictions in 1992. 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 movement in the age structure of 'traditional apprenticeships', towards persons aged 25 years and over, from 7.2% in 1996 to 12.3% in 2002 (Brooks 2004, p.16-17).

Both males and females in-training have increased in number since 1996, with the percentage of females increasing. At 31 December 2002, 35.9% of apprentices and trainees in-training were female, up from 20.4% in 1996. Almost half (46.8%) of 'other' apprentices and trainees were female in 2002, whereas there was only a small increase in 'traditional apprentices' who were female from 10.8% to 12.0% (Brooks 2004, p.18).

Employment characteristics

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. This includes a small percentage in school-based apprenticeships, which were introduced in 1999. Over the period 1996 to 2002, 'traditional apprentices' were all undertaking full-time contracts (Brooks 2004, p.22).

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) (table 2), with only a small number of 'other' apprentices and trainees in these areas (2300 and 2200, respectively). Within these occupation sub-groups, 'traditional apprentices' were mostly in *carpentary and joinery tradespersons* and *motor mechanics* occupations

(NCVER 2003). All 'traditional apprenticeship' occupations have increased in absolute numbers over the period 1996 to 2002, with the exception of *mechanical and fabrication engineering tradespersons* (table 2) (Brooks 2004, p.24).

Table 2: 'Traditional apprenticeships' by occupation ('000)

	1996	1997	1998	1999	2000	2001	2002
'TRADITIONAL APPRENTICESHIPS'							
Tradespersons (not further defined)	0.0	0.0	0.0	0.0	0.2	0.3	0.4
Mechanical and fabrication engineering tradespersons	18.6	18.8	17.9	16.6	15.2	14.2	14.3
Automotive tradespersons	18.3	18.0	18.4	19.3	20.2	19.9	20.4
Electrical and electronics tradespersons	14.1	14.9	14.2	15.1	15.8	15.7	16.1
Construction tradespersons	20.7	20.4	21.6	24.9	27.4	26.7	28.7
Food tradespersons	12.3	13.2	13.4	12.8	13.0	13.1	14.1
Skilled agricultural and horticultural workers	2.9	2.9	2.9	4.0	4.6	4.6	4.4
Other tradespersons and related workers	14.4	14.1	14.1	15.1	16.3	16.3	16.9
Total	101.3	102.2	102.5	107.9	112.7	110.7	115.4

Note: Totals may not add up due to rounding.

Source: NCVER Apprentice and Trainee Collection, June 2003 estimates.

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%). 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 (Brooks 2004, p.26).

Training rates

The proportion of apprentices and trainees in the employed workforce has increased from 1.9% in December 1996 to 3.8% at the end of 2002. In younger age groups, apprentices and trainees made up a larger proportion of employed persons (14.6% for those aged 15 to 19 years), compared with older age groups (1.4% for those aged 45 and over) in 2002 (Brooks 2004, p.17).

In the *trades and related workers* occupation, apprentices and trainees have consistently accounted for around 11% of employed persons in that occupational group since 1996 (table 3). Despite this consistency there has been variation across occupations. The proportion of apprentices and trainees in *mechanical and fabrication engineering tradespersons* declined from 10.2% to 7.9% over the period, while the proportion of *food tradespersons* increased from 18.6% to 25.3% (table 3). The proportion of apprentices and trainees to employed persons has increased in other major occupational groups, with the exception of *managers and administrators* (table 3) (Brooks 2004, p.24).

The number of 'traditional apprentices' as a proportion of employed tradespersons was stable between 9% and 10% over the period 1996 to 2002 (Brooks 2004, p.12).

Table 3: 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
Mechanical and fabrication engineering tradespersons	10.2	10.0	9.9	9.5	8.0	7.8	7.9
Automotive tradespersons	16.8	16.9	17.6	17.6	18.6	16.1	16.3
Electrical and electronics tradespersons	9.1	9.2	8.9	9.0	9.4	10.1	9.1
Construction tradespersons	9.2	10.1	9.0	9.8	10.2	10.2	11.3
Food tradespersons	18.6	19.7	22.3	19.7	20.8	21.0	25.3
Skilled agricultural and horticultural workers	4.6	4.7	5.0	6.6	8.5	8.3	7.5
Other tradespersons and related workers	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: Brooks 2004, p.26.

Young apprentices and trainees

For 15 to 19-year-olds 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; especially in 'traditional apprenticeship' occupations. More than three in four teenagers employed in the trades at 31 December 2002 were undertaking a 'traditional apprenticeship', up from around two in three at 31 December 1996 (Brooks 2004, p.18).

Young male 'traditional apprentices'

'Traditional apprentices' are overwhelmingly male, young, employed full-time and training towards an AQF level III certificate. Young male 'traditional apprentices' show similar patterns in terms of their place of residence and expected contract duration to those found for all 'traditional apprentices' (table 4). Over 80% of young male 'traditional apprentices' had an expected contract duration of three to fours years, a similar proportion as for all 'traditional apprentices'. Similarly for residential region around 59% lived in capital cities and 29% in rural areas for both young male 'traditional apprentices' and total 'traditional apprentices'.

Some differences occurred in the occupational distribution of young male 'traditional apprentices' and total 'traditional apprentices' (table 4). There is a higher proportion of young male 'traditional apprentices' (29%) compared to all 'traditional apprentices' (25%), in the *construction tradespersons* occupation group. However the

opposite occurs for the *other tradespersons and related workers* occupation group (8% of young male 'traditional apprentices' and 15% of all 'traditional apprentices').

Table 4: Comparison of young male 'traditional apprentices' and all 'traditional apprentices', 31 December 2002 (percentage)

	Young male 'traditonal apprentices'*	All 'traditional apprentices'*
OCCUPATION		
Tradespersons (not further defined)	0.1	0.4
Mechanical and fabrication engineering tradespersons	13.5	12.4
Automotive tradespersons	20.9	17.6
Electrical and electronics tradespersons	15.4	14.0
Construction tradespersons	28.6	24.9
Food tradespersons	10.4	12.3
Skilled agricultural and horticultural workers	3.5	3.8
Other tradespersons and related workers	7.7	14.6
Total	100.0	100.0
REGION		
Capital city	58.4	58.9
Other metro	8.1	8.0
Rural	29.4	29.0
Remote	2.9	2.9
Interstate	1.2	1.2
Total	100.0	100.0
DURATION		
Over 2 and up to 3 years	12.9	15.6
Over 3 and up to 4 years	83.9	81.7
Over 4 years	3.3	2.7
Total	100.0	100.0

Note: Percentages based on known total.

Source: NCVER Apprentice and Trainee Collections (June 2003 and September 2003 estimates).

Conclusions

Apprenticeships and traineeships have shown a lot of change over the past six years. 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 (Brooks 2004, p.7). In contrast, the portrait of 'traditional apprenticeships' has been one of constancy. The basic structure of 'traditional apprenticeships' continues to endure, such that in 2002 all were full time, 99% were at AQF level III and 82% had an expected duration of between three and four years. 'Traditional apprentices' are also overwhelmingly young and male. These proportions were almost identical to those in 1996 (Brooks 2004, p.6).

Even focusing on the young males in 'traditional apprenticeships' there is still constancy across some attributes, such that there are only minor differences in the occupational distribution of young male 'traditional apprentices'.

References

Brooks, L. (2004). Trends in 'traditional apprenticeships', NCVER, Adelaide.

NCVER (National Centre for Vocational Education Research) apprentice and trainee data collection, June 2003 and September 2003 estimates.