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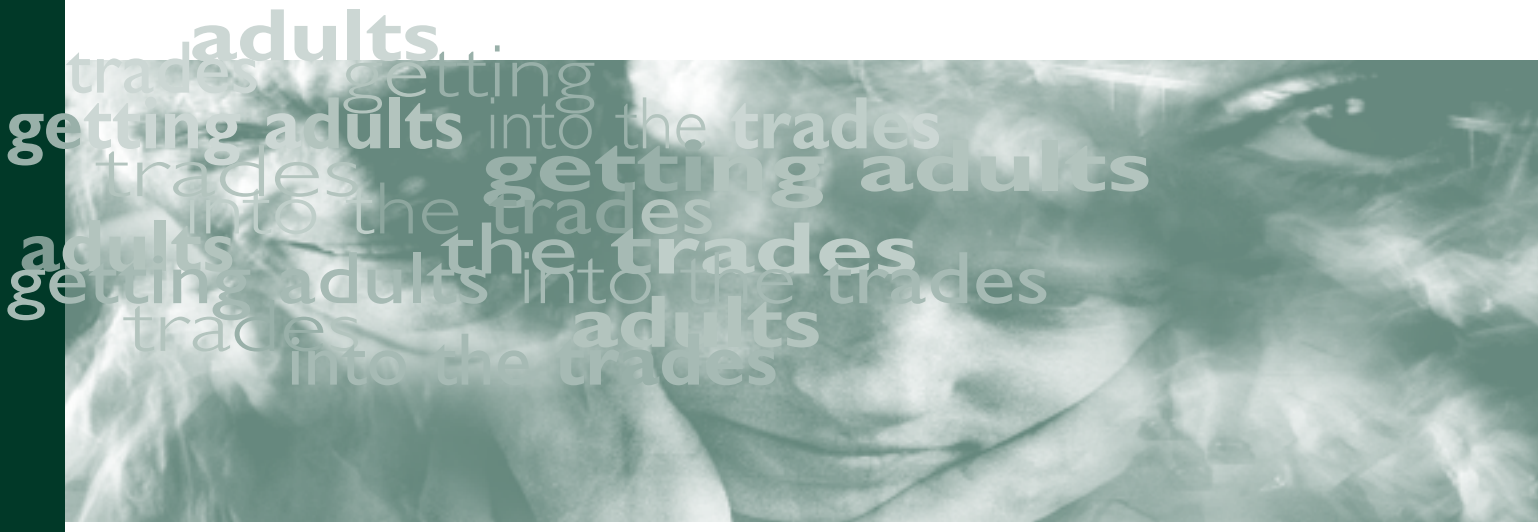


# Getting adults into the trades

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**Publisher's note**

This report has a companion volume *Getting adults into the trades: Case studies*, which can be found on NCVER's website www.ncver.edu.au



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# Executive summary

With the ageing of the Australian population, changing life career patterns, and continuing shortfalls in supply in the 'traditional' trades, school leaver apprenticeships no longer meet most or all workforce demands. Adults are becoming an increasingly important recruitment source. This is the rationale for this report on getting adults into the trades.

The report begins with a summary of relevant statistics and research on adults in trades, followed by a detailed analysis of employer-based case studies conducted in 2001. The final chapter develops concluding themes and strategies for getting adults into the trades.

Australia's apprenticeship and traineeship system has been transformed. After a long period of little growth, training numbers grew rapidly from 1995. The apprenticeship and traineeship system has more than doubled in size, from 136 000 contracts of training (apprenticeships and traineeships) in mid-1995 to 295 000 by the end of 2000. Traineeships now comprise half of the numbers in training, compared to 10% in 1995. Women now comprise more than 30%, compared to 5% in 1995.

Traineeships have expanded around, rather than at the expense of, the trades. The trades, and the core 'traditional' trades groups (metal, auto, electrical and electronic, and construction), have maintained their training numbers and shares of total employment. They absorb new technologies and skills to stay relevant to the contemporary Australian economy.

However, the composition of trade training is quite different from that of contracted training generally. Whereas the 25-and-over age group accounts for more than 30% of all training at the end of 2000, they only occupy about 14% of all 'trades and related' training or 12% of all training in traditional trades. Women occupy more than 30% of all training places at the end of 2000, but only 13% in 'trades and related' and just 1% in the traditional trades. The issue of 'women in trades' appears to have fallen from view in VET policy.

While there is little research relating directly to the question of 'adults in the traditional trades', a number of recent VET studies and reports are relevant to the consideration of their prospects. As a background to the case studies, these are considered here.

The post-1998 new apprenticeships system and recognition framework, the report notes, introduce revised concepts that will impact on trade training and adults in trades. These include VET-in-Schools programs, 'user choice', new apprenticeships centres, and training packages with competency-based training. Rather than being derived from national VET policy prescriptions, the current interest in adults in trades appears to relate to the general ageing of the population and labour force, and to the supply–demand situations in the trades.

Studies show that the customary four-year trade indenture is a net cost to the firm, which may be borne in deference to social commitments to training or expectations of keeping on the apprentice. Employer costs are higher in the 'traditional' trades compared with others.

There is cautious experimentation with 'alternative pathways', but these are not common in the core 'traditional' trades. The rate of workforce replenishment into the 'traditional' trades through formal apprenticeships remains consistently low, about 2% per annum. It is not surprising,

therefore, that shortages might occur in some trades, or that non-apprenticeship or adult training pathways might open up over time. Recent national industry-sponsored studies on trade skill shortages highlight the importance of adult training opportunities in this context.

The case studies analysed in this report appear in full in a separate National Centre for Vocational Education Research (NCVER) web publication, *Getting adults into the trades: Case studies*. About 30 companies employing adult apprentices in the 'traditional' trades were approached, resulting in 16 participants from all States and the Australian Capital Territory (ACT). Questions were directed to firms' apprentice managers, to their training providers and adult apprentices. The sample was representative of the 'traditional' trades workforce, with manufacturers and group training companies being prominent. About 7% of the firms' 1800 apprentices were over 25. Reflecting national statistics, very few were females.

While there are adult-friendly innovations, few of the companies could be said to have implemented a broad, or strategic, model for getting and retaining adults in their key trades.

About half of the companies still use technical and further education (TAFE) as the main off-the-job provider, with others redirecting training into group schemes or their own skills centres. New approaches to recruitment are boosting adult apprentice opportunities. A few companies primarily draw apprentices from annual school leaver intakes. Others may apprentice existing (adult) employees, or outsource recruitment to their group schemes.

A key point in the case studies is the adjustments that may or may not be made to accommodate 'high–low' adult apprentice wages. The wages tend to be 'high' from the employer perspective relative to junior rates, but 'low' from the apprentice perspective relative to adult wages generally. While this issue may not be getting much attention in formal industrial agreements, employers do make useful localised wage adjustments, particularly by keeping the adults on at their existing company wages or offering overtime.

When measured against the potentially positive impacts on training costs and skill shortages, acceleration of adult trade apprentices through wage and competency levels is uncommon. It may increase as trade-related training packages increase their market penetration.

Adult apprentices are completing individual blocks of training early and, to a limited extent, may 'sign off' their entire indentures early. Some employers give their adult apprentices enhanced outcomes and opportunities, including 'dual ticketing' in metal and electrical trades, special projects and skills within the apprenticeship, or assistance with study towards post-trade management and professional jobs. Such opportunities can ease the financial or family difficulties that may be experienced through the previously mentioned 'low' wages.

Employers' and training providers' confidence in adult apprentices is not matched by a confidence that their numbers will rise. Adult apprentices are valued for their maturity, mentoring of younger colleagues, dependability and safety-consciousness. These positive features tend to outweigh any perceived workplace inflexibilities or learning difficulties.

Reflecting recent research, most companies report high training completion rates among adult apprentices. Unfortunately, they tend to use up suitable internal applicants quickly; moreover, they do not expect many more suitable external applicants to appear under current industrial conditions. Some employers urge extra government placement assistance, income support, or employer incentives, for adult apprentices. One calls for broad improvements in the support given to post-trade (adult) training and company training infrastructure.

Reinforcing employer views, training providers make a point of adult apprentices' contributions to class cohesion, discussion and outcomes. Astute training providers can adjust the learning materials or environment to suit adult apprentices, or may consciously pair adults with their peers or with juniors to improve class stability and learning outcomes.

The adult apprentices have diverse backgrounds. Some are classic 'second-chance' apprentices or 'adult improvers', whose new skills build up smaller firms' quality and productivity. Others in larger firms are 'high achievers', including former VET or university students, with career and management aspirations. While praising employer and training provider support, interviewees baulk at the low wages or lengthy qualification periods.

The third chapter of the report recapitulates the main features of the research and case studies and develops concluding *themes and strategies* for getting adults into the trades.

## Reviewing adult apprenticeship trends and policy

This theme originates from a comparison of adult apprenticeship trends and the treatment of adult training issues in VET policy. Recent adult and female gains are much lower in the 'traditional' trades than in training generally, and the case studies do not suggest further strong gains, although adults can make particular contributions to skill gaps and shortages. The following actions are suggested for more intensive policy scrutiny of adult training:

- ✧ more intensive reporting of trends in adult and adult female apprenticeships
- ✧ emphasising, in VET performance measurement, adult training priorities and outcomes
- ✧ possible indicative targets for adult and adult female training in 'traditional' trades

## Managing adult apprentice costs and wages

This theme results from case-study findings that 'high–low' adult apprentice wages are a key disincentive to increased numbers. The case studies reinforce research findings that training and adult training needs are not prominent issues in industrial agreements. Employers commonly make practical wage or overtime adjustments to help adult apprentices through, but reductions in the indenture period are uncommon. The following industrial and training actions are suggested for managing adult apprentices' costs and increasing their numbers:

- ✧ encouraging the practice of employing adult apprentices on equivalent company wages
- ✧ re-examining relevant trade awards for fair variations to accommodate adult apprentices
- ✧ compensating 'low-wage' adult apprentices with shorter indentures or enhanced skilling
- ✧ enhancing the employer incentives that attach to adult apprentices in trades

## Broadening adult trade and skill pathways

This issue relates to the evidence of progress with, but constraints to, adult apprentice pathways in trades. Statistically, non-trade pathways to skills are increasing in volume. In the case studies, innovations with training providers, recruitment, wage and competency progressions, enhanced skill and post-trade career progressions, all benefit adult trade apprentices. The following actions are suggested to broaden adult trade and skill pathways:

- ✧ developing and documenting 'model' pathways for adults in 'traditional' trades
- ✧ increasing pre-vocational and non-trade adult pathways towards the 'traditional' trades
- ✧ introducing forms of enterprise training support to boost adult and post-trade training
- ✧ considering forms of adult employer or adult study benefits for the post-trades areas

## Training adult apprentices for skill gaps and shortages

This theme relates to the potential of adults towards ameliorating recurrent under-supplies and skill shortages in the 'traditional' trades, where annual replenishment rates through formal apprenticeship barely reach 2%. In view of their high training completion rates and capacity to fill

different skill and career niches in enterprises and industries, adults can make a greater contribution to meeting skill shortages. The following actions are suggested:

- ✧ investigation, and promotion, of high adult apprenticeship completion rates
- ✧ promotion to industry of adults as a supply group for niche trade and post-trade markets
- ✧ adult trade and skill pathways that respond to national industry skill shortage studies

## Adult apprentices contributing to cohorts' training outcomes

The case studies demonstrate that adult trade apprentices raise the quality of on- and off-the-job training in their work and class groups. Adult apprentices are seen as committed, and dependable, valued as role models for juniors and for their high training completion rates. Training providers promote, and may adjust the learning environment for, the contribution that adults can make to class cohesion and outcomes. These actions are suggested:

- ✧ more research of adult apprentice impacts on cohorts' training quality and outcomes
- ✧ promoting adult apprentices' beneficial work and classroom influences to industry

# Getting adults into the trades: Statistics and research

The major chapter of this report consists of case studies of firms employing adult apprentices in the trades. As a background and a guide to these case studies, this chapter summarises important statistical trends and developments, and examines relevant research.

With recent rapid growth in the training system, the over-25s share of apprenticeships and traineeships generally has jumped from about 5% to about 30% over 1995–2000. In 2000, women occupy about *30%* of all apprenticeships and traineeships.

In the mechanical, automotive, electrical and electronic, and construction trades combined, the statistics indicate that, in 2000, the over-25s age group makes up about 12% of the numbers in training in 2000, up from just over 8% in 1995 (see table 1). As in 1995, women make up only 1% of total numbers in training, but this rises to about 4% among the over-25s group as a whole.

## General trends in apprenticeships and traineeships

The most significant shift recently in apprenticeships and traineeships is well known. After a long post-war period of fluctuation and fairly limited growth, Australia's apprenticeship and traineeship system escalated in 1995 and has since more than doubled in size. Shorter (often one year) 'traineeships' in non-trade areas now comprise about half of the total numbers in training. Women now comprise over 30% of the training base, compared with about 5% in 1995.

Certainly, the post-1995 surge was facilitated by the creation of the Australian Traineeship System, but that policy change took place as early as 1985. 'The remarkable surge after 1995 does not appear to have been anticipated widely,' comments Saunders (2001, p.44). 'The existence of traineeships was surely a precondition for growth. Traineeship policy and marketing may have unlocked latent changes in employers' training aspirations and preferences'.

Two significant policy changes, both relevant to this report, occurred only in the 1990s. These were the 1992 removal of age restrictions in apprenticeships (see NCVER 2001d) and the permission for traineeships to be 'embedded' within existing trades areas.

Recent statistical reports (NCVER 1998, 1999a, 1999b) and *Australian apprenticeships* publications (NCVER 2001a, 2001b, 2001c, 2001d) expand on the post-1995 growth patterns.

At 30 June 1995, the total number of contracts of training (NCVER 2001d, p.4), including a mere 12 000 traineeships, was about 136 000. Over the entire period 1975–95, the total had never been lower than 123 000 but had only exceeded 150 000 in the years 1988–92.

Three years later, NCVER (1998) recorded about 195 000 individuals in contracts of training, about 65 000 in traineeships with the remainder in apprenticeships. There had been 123 000 training commencements in 1997–98. Over 50% were aged 20 and older and over 30% were females, major departures from the customary age and sex composition of contract training.

This 1998 report notes the formal abolition, under the new apprenticeships policy banner (see Kemp 1996), of the apprentice–trainee distinction as from January 1998. Given its specific topic,

the present report usually retains the distinction. Important trends for 'apprenticeships' and for the subset of 'traditional trades' are different from those for 'traineeships' and for contracted training generally.

NCVER (1999a) estimates about 134 000 training commencements for the calendar year 1998 and 206 000 in training. The occupational group 'trades and related workers' (Australian Standard Classification of Occupations [ASCO] major group 4) retains over 60% of total numbers in training, but its share of total 1998 commencements is just 32%.

The same report notes that the big five trade groups (mechanical, automotive, electrical, construction and food) have seen little growth in commencements for two to three years. Having had only a very small share of all training in 1995, the non-trade 'intermediate clerical, sales and service' group has grown rapidly, occupying about 32% of commencements and 18% of in-training numbers.

An NCVER overview statistical report makes the important point that,

> … *even though more apprenticeships and traineeships are being taken up by older people, the growth in 15 to 19-year-old participation in apprenticeships and traineeships (over 1995–98) exceeded the growth of this age cohort in the general population. The teenage participation rate in apprenticeships and traineeships is actually growing.* (NCVER 1999b)

By 2000, the NCVER publication, *Australian apprenticeships: Research at a glance* (NCVER 2001d, p.5) is able to boast that Australia is fourth in the world, 'just behind Switzerland, Germany and Austria in terms of coverage of the workforce by the apprenticeship system'. The (new) apprenticeship system is said to be more popular than ever and more reflective of the structure of the labour market, with very good employment outcomes and significant growth potential.

By 30 June 2000, the total number of contracts of training was just over 275 000, up 100% from the figure of 136 000 in 1995. The 'trades and related occupations' occupied just over 50% of all contracts of training, down from 60% in 1998.

By 31 December 2000 (NCVER 2001a), the total numbers had climbed further to 295 000, but the 'trades and related' share of training had dropped to 45%. Females continued to hold more than 30% of training positions, and adults over 25 held 38% of positions.

# Training trends in trades and 'traditional' trades

Against a general trend of rapid growth since 1995, the entire 'trades and related' area now occupies only about half of the total numbers in training and a quarter of all training commencements.

As NCVER (2001d) points out, this 50% share is still much higher than the same group's 14% share of employment. By contrast, the 'clerical, sales and service workers' and 'labourers and related' groups have about the same share of new apprenticeships as their share of employment, while the 'associate professionals' share of apprenticeship is well below its share of employment.

While the 'trades and related' group's overall share of training numbers has shrunk considerably, its share of employment has not. The group's share of training dropped from nearly 90% in 1995 to about 50% in 2000, but its share of total Australian employment fell just marginally from 14.5% to 13.6% (NCVER 2001c, table 87). Similarly, the growth trend since 1990 for employment in all trades lies above that employment in all occupations, although construction trades run somewhat against this trend (NCVER & DEWRSB 2001, p.6).

This 'trades and related' area (ASCO 4) includes food trades, agricultural and horticultural workers, and 'other' trades (printing, wood, hairdressing, textile and miscellaneous trades), as well as the core mechanical, auto, electrical and electronic, and construction trades.

The last four trade groups still occupy about 67% of total numbers in training in the 'trades and related' group, just down from the 69% recorded for 1995 (see NCVER 2001b, p.65).

Recent reports, and special extracts of unpublished NCVER statistics, build a picture of trends in these four trade groups, which are the main focus of the present report.

NCVER (2000d) studies the skills supply flowing into significant trade-employing industries such as electricity, building and construction, manufacturing, and retailing—all subjects of case studies in the present report. It is found that the 'trades and related' area has lost a significant training share between the end of 1995 and 1999. Its share of all commencements has dropped from 65% to 28%, of in-training numbers from 85% to 52%, and of completions from 72% to 42%.

Three related reports consider in more detail the recent supply trends in mechanical, auto, and electrical trades. Numbers are found to be fairly stable overall, with the over-25 age group slightly increasing its numbers and its shares of training.

- In mechanical and fabrication trades (ASCO 41), the number of training commencements falls from 6800 to 4760 over 1995–97, recovering to 6130 in 1998 (NCVER 2000c). Numbers in training fall from 19 840 to 18 240, the over-25s share improving from 2010 (10%) to 2110 (12%). There is significant growth in apprenticeships for mechanical engineering technicians.
- In the three main auto trades—mechanics, auto electricians and panel beaters, (ASCO 4211–13)—the number of training commencements falls slightly from 6170 in 1995 to 5610 in 1998 (NCVER 2000a). Total numbers in training fall from 18 320 to 17 450, but the over-25s share improves from 930 (5%) to 1200 (7%). As table 1 shows, the over-25s have a better share of numbers in training for the *overall* auto trades group (ASCO 42).
- In electrical and electronic trades (ASCO 41), the number of training commencements rises from 5150 to 5660 over 1995–98 (NCVER 2000b). Total numbers in training rise from 15 430 to 17 100, the over-25s improving from 1840 (12%) to 2300 (13%).

Table 1 reconsiders and updates these findings from NCVER (2000a, 2000b, 2000c), using unpublished NCVER statistics:

- In the four 'traditional' trade groups under consideration here, numbers in training climb from 82 900 at the end of 1995 to 86 400 at 2000. This improvement is largely due to construction trades, although NCVER and DEWRSB (2001) note that the higher construction commencements are not reflected by higher completions.
- The total number of over-25s climbs from 7000 (8%) to 10 300 (12%) over 1995–2000. The over-25s increase their share in each of the four groups. The increases are from 10% to 12% (mechanical), 6% to 12% (auto), 12% to 15% (electrical), and 7% to 11% (construction). For the four groups together, the increase is from 8% to 12%.
- For the entire 'trades and related' group, which includes food, agricultural and 'other' trades, the over-25s increase their share in a fairly similar manner, from 8% in 1995 to 12% in 1998 and 14% in 2000.

Taking a longer term view, Webster et al. (2001, figure 1, p.189) find significant improvement over some years in adults' shares of training in the 'traditional' trades. The percentage of apprentice commencements over the age of 21 years has risen from 5% or less in 1980–81 to 15% or more (mechanical, electrical and construction) or 10% or more (auto) by 1996–97. This trend analysis of *commencements among over-21s* does not, however, necessarily speak for large increases on the present 12% figure for *in-training numbers among over-25s*.

**Table 1: Numbers and percentages in training, by 'traditional' and all trade groups, by age group, December 1995, 1998 and 2000(1)**

| Trade group | 1995 | 1998 | 2000 |
|---|---|---|---|
| Mechanical and engineering fabrication (ASCO 41): | | | |
| Up to 24 in age | 17 924 | 17 782 | 14 802 |
| 25 and over | 2 014 (10%) | 2 434 (12%) | 2 073 (12%) |
| **Total** | **19 938** | **20 216** | **16 875** |
| Automotive (ASCO 42): | | | |
| Up to 24 in age | 20 119 | 20 522 | 20 585 |
| 25 and over | 1 321 (6%) | 3 025 (13%) | 2 672 (12%) |
| **Total** | **21 440** | **23 547** | **23 257** |
| Electrical and electronics (ASCO 43): | | | |
| Up to 24 in age | 13 619 | 13 667 | 13 786 |
| 25 and over | 1 830 (12%) | 2 192 (14%) | 2 341 (15%) |
| **Total** | **15 449** | **15 859** | **16 127** |
| Construction (ASCO 44): | | | |
| Up to 24 in age | 24 313 | 22 485 | 26 958 |
| 25 and over | 1 798 (7%) | 2 169 (9%) | 3 176 (11%) |
| **Total** | **26 111** | **24 654** | **30 134** |
| All 'traditional' trade groups (ASCO 41–44): | | | |
| Up to 24 in age | 75 975 | 74 456 | 76 131 |
| 25 and over | 6 963 (8%) | 9 820 (12%) | 10 262 (12%) |
| **Total** | **82 938** | **84 276** | **86 393** |
| All 'trades and related' groups (ASCO 41–49):(2) | | | |
| Up to 24 in age | 111 110 | 109 390 | 113 056 |
| 25 and over | 9 675 (8%) | 15 402 (12%) | 17 995 (14%) |
| **Total** | **120 785** | **124 792** | **131 051** |

Source: Unpublished NCVER apprenticeship and traineeship statistics

Notes: (1) The great majority of the numbers are 'trade' rather than 'traineeships' in nature, i.e. AQF 3 or higher (unpublished NCVER statistics). Numbers are at 31 December each year
(2) Including food trades (ASCO 45), skilled agricultural and horticultural (ASCO 46), and 'other' (ASCO 49, printing, wood, hairdressing, textile and miscellaneous) trades

Other unpublished NCVER statistics can be used to show that, in the 'traditional' trades, contracts of training are overwhelmingly concentrated in full-time as opposed to part-time jobs, in the private sector or group training schemes as opposed to government, and with men rather than with women.

While group training has generally been in the business of trades rather than traineeships, this is becoming less so over time. 'Trades and related occupations' now occupy (see NCVER 2001e) a little over 60% of all group training contracts in 2000, down from nearly 90% of group training contracts in 1995. The 60% figure is moving closer to the all-contracts figure of 50% that is cited above for the year 2000.

Females occupy over 30% of all contracts of training at 2000 (NCVER 2001b, p.86). However, their share is only 13% in the 'trades and related' group, just up from 12% in 1995 (NCVER 2001c, table 101).

In the 'traditional' trades group of this report, which excludes the female-dominated hairdressing trades, the position of females and adult women is negligible. It has not shifted despite having been a substantial Commonwealth policy agenda over a number of years. At table 2, women represent only 1100 (1.3%) of 86 400 in training in mechanical, auto, electrical and construction trades, or 370 (3.6%) of the 10 300 in training aged 25 or more.

While the training system is 'increasingly open to females and people of all ages' (NCVER 2001b, p.89), this is not so in the traditional trades. The resounding success with 'women in new apprenticeships' since 1995 overshadows persistent failure with 'women in trades' over a longer period. Interestingly, 'women in trades' is not highlighted as a performance reporting issue in

current national reporting (see ANTA 2000b) or the recent *Australian apprenticeships* and *Women in VET* publications (NCVER 2001a, 2001b, 2001c, 2001d, 2000e).

**Table 2: Numbers and percentages in training for 'traditional' trades, by age group by sex, December 1995 and 2000(1)**

| Trade group | 1995 | | | 2000 | | |
|---|---|---|---|---|---|---|
| All 'traditional' trade groups (ASCO 41–44): | Male | Female | Total | Male | Female | Total |
| Up to 24 in age | 75 135 | 840 (1.1%) | 75 975 | 75 363 | 768 (1%) | 76 131 |
| 25 and over | 6 728 | 235 (3.4%) | 6 963 | 9 895 | 367 (3.6%) | 10 262 |
| **Total** | **81 863** | **1 075 (1.3%)** | **82 938** | **85 258** | **1 135 (1.3%)** | **86 393** |

Source: Unpublished NCVER apprenticeship and traineeship statistics, at 31 December each year

Note: (1) The great majority of the numbers are 'trade' rather than 'traineeships' in nature, i.e. AQF 3 or higher (unpublished NCVER statistics). Numbers are at 31 December each year

NCVER (2001b, table 45, p.109) points out that the 'trades and related' area is holding its own in terms of numbers of completions, although its share of total training completions may have fallen sharply. The number of completions has risen from 23 400 in 1994–95 to 25 700 in 1999–2000 and the trend since then is further upwards.

The numbers in 'trades and related' training have grown (NCVER 2001b, p.173) from about 120 000 in mid-1995 to 140 000 in mid-2000. Within that, the report sees room for further growth in the 'traditional' trades. Significantly, in 2000, a number of these trades have less than 10% of their workforce in the form of apprentices, or they continue to feature in official national skill shortage lists.

The statistics confirm that, contrary to some expectations, the traditional trades have held their own in the 1990s. They continue to form and reform themselves as an important set of skills for the contemporary Australian economy and their replenishment (including the contributions made by adults) is vital.

# Research pointers on adults in the 'traditional' trades

In itself, 'adults in the traditional trades' could not be said to be a prime topic for vocational education and training (VET) research.

However, a number of recent VET and apprenticeships research studies and reports offer insights into the training demand-and-supply issues that may impact on the position of adults in the trades, and the prospects for improvement of that position.

These studies and reports have formed a general background to the framing of the present report's case studies and questions, as well as the interpretations of the responses.

## Training policy and system issues

*Training for real jobs* (Kemp 1996) is a landmark for the current system for 'new apprenticeships'. Taking up the smallish traineeship system as it then was, and absorbing 1994 recommendations in favour of a training market, this ministerial statement recommended an industry-led training system, with apprenticeships and traineeships going beyond the traditional occupations, more money for VET-in-Schools programs, 'user choice' of training providers, redirection of training incentives, and the improvement of regional training services (that is, the current new apprenticeships centres).

The new apprenticeships system took formal effect from 1998, as did the Australian Recognition Framework (ARF). Under this framework, the Australian National Training Authority (ANTA) began to endorse training packages, whereby industry training advisory bodies (ITABs) develop

qualifications, competencies and assessment guidelines for industries and occupations. ANTA has presided over a considerable increase in Commonwealth and State funding for VET since its formation in 1992.

All of the 'traditional' trades considered in this report are now covered by established training packages (although only some apprentices are actually trained using these packages). The most relevant packages are those for the metal and engineering, automotive, electrotechnology, general construction, aeroskills, and telecommunications, industries.

In 1999, Mitchell et al. reviewed the current state of legislation for the VET sector, post-ARF and new apprenticeships. While they find that VET law is broadly supportive of national policy, the legislation is seen to lag behind the training flexibility embodied in new apprenticeships. Compared with the 'integrated' Australian Qualifications Framework (AQF) ladder, there are seen to be patchy or divergent legal provisions for trades, traineeships, 'declared vocations', and structured (that is, non-apprenticeship) work placements. An ANTA (2000a, p.54) report urges continuing legislative reform to diversify the pathways for apprenticeships and traineeships.

The current interest in 'adults in trades' could be said to arise from research by NCVER and other organisations about the state of the labour market and the state of the trades labour markets, rather than specific prescriptions to be found in VET policy or performance measurement.

As noted above, one major concern is that the trades are replenishing their workforces at too low a rate to address perennial skill shortages. The ageing of the population is a key reason cited for giving greater attention to adults in trades. 'The proportion of the population aged under 25 will fall from 35% today to only 30% by 2020', argues NCVER (2001b, pp.179–80). 'There is no choice but to continue with the recruitment of older people into Australian apprenticeships'.

The national strategy for VET (ANTA 1998) gives tacit support to (increasing) adult (skill or trade) training, in terms of its vision for lifelong updating of workers' skills and its first objective of 'equipping Australians for the world at work'.

Trade training issues, and adult trade training issues, including women in trades, have not featured prominently in the national priorities set annually as an accompaniment to the national strategy, nor in the *Annual national reports* (see ANTA 2000b) that follow up on its performance.

The perception may be that adult interests are served well enough by the rapid expansion of adult traineeships since 1995, which is well documented in ANTA (2000b). It could be argued that the priorities should continue to rest with 'younger' adults, in a situation where the *Annual national report* notes continuing under-performance on the 'Finn' target for 22-year-olds (that 60% should be in or have completed a substantial VET or university program). The report (ANTA 2000b, p.56) does, however, note that 're-skilling of older workers will become increasingly important' due to the ageing of the Australian workforce.

In discussing Queensland trends, Smith (1998) contends that the increasing proportions of adult (over age 25) apprentices and trainees are *not* reflective of Queensland Government priorities. Schofield (1999) makes a similar point, although her concern is more with the upward age creep of traineeships than apprenticeships.

## Training cost and training wage issues

An important consideration relating to the opportunities available to adult apprentices (who may be perceived as 'more costly' to train) is the manner in which training costs are or should be shared between the firm, the apprentice, and government.

Relevant here is the rise over the late 1990s of the public training market and its 'user choice' provisions. These provisions open up some of the public VET funding for competition, although

the majority technical and further education (TAFE) provider still retains about 75–80% of the total market.

Saunders (2001) summarises recent studies on the training market and user choice, noting the reservations that have been expressed about these concepts and the extent of their impact on training efficiencies and employer training costs. Billett and Cooper (1998) imply that trade-intensive industries, such as metals and construction, will tend to have better access to public VET funding, by virtue of having recognised apprenticeships and traineeships in their workforces, and thus may be inclined to invest less in training (and training innovation) than emerging industries.

Several recent studies highlight the general benefits of private training investment by Australian firms. As summarised by the Rural Industry Working Group (RIWG 2001), these benefits include positive and high returns on training investment, a range of returns (more labour productivity, value-adding, multi-skilling or innovation), greater training pay-offs from training for specific business needs, and spin-offs from training when firms need to pursue other management changes.

In the particular field of trade training, and especially in the traditional trades, apprenticeship is classically held to be a 'net cost' to the firm, at least over the life of the indenture. The research does not give clear pointers on the different costs or durations of adult training.

Dockery et al. (2001) estimate an average net cost of $38 000 over four years. A study by the Regional Economic Research Unit and Group for Research in Employment and Training (RERU–GREAT 1998) offers similar or higher figures. Costs are found to be higher in 'traditional' trades than in food and hairdressing trades, and in all trades high in the first year but shifting to a small net benefit by year four. The cost for the first training year is large, compared with available (see below) employer incentives. Over 50% of the total four-year cost is said to fall to the firm, with more of the remainder falling to the apprentice than it does to government.

Employers are said to perceive a net training benefit (Dockery et al. 2001), or to discount high training costs in favour of social and community motives for training (RERU–GREAT 1998). Possibly, employers are unconsciously factoring in benefits that will accrue if apprentices stay on past the formal apprenticeship term, as many adult apprentices are indeed inclined to do.

Also significant in the training costs equation are various forms of training levy and training incentive that may be offered from time to time by the Commonwealth or State Governments.

The recent Commonwealth venture into training levies was short-lived (1990–94). As Ray (2001, p.27) notes, training incentives for employers have proved to be much more durable, since their modest introduction in 1977 in the form of the Commonwealth Rebate for Apprentice Full-time Training (CRAFT). Today's version of CRAFT, the Commonwealth New Apprenticeships Incentives Programme (DETYA 2001), expends close to $400 million a year. The same levels of employer benefits attach to adult apprentices, although in practice an adult will be more likely to be ruled out by virtue of possessing an existing qualification.

As summarised in Saunders (2001), various studies query the impact of employer incentives on apprentice recruitment, or endorse incentive funding for existing employees under some circumstances, or suggest that government training incentives should take the form of 'levers' for private investment rather than direct per capita subsidies for each apprentice or trainee. The drift of these studies is to question whether the costs of apprentice training should be moved further away from firms and government towards apprentices, particularly by reducing apprentice wages.

One of the few recent empirical studies of employer incentives, that of the Centre for Labour Market Research (CLMR 1997), finds that they have a positive impact, but that a relatively large increase in incentives is required to induce additional enterprise training. At that time, the Commonwealth was floating but later discarded a proposal to withdraw the incentives from 'large' employers (100 employees or more).

Whereas Hawke and Wooden (1997) summarise the Australian shift from centrally determined awards to enterprise bargaining, Guthrie and Barnett (1996) find that relatively few enterprise bargaining agreements of the time really deal with the structured training dimension of workplace relations. Jenkins (1999) later makes a similar comment from the metals and manufacturing (Australian Industry Group) perspective.

Examining the effects of award restructuring, Webster et al. (2001) point to persistent evidence of large numbers of qualified tradespeople doing non-trade work, at the same time as large numbers of unqualified people are doing trade work. To some extent, they argue, employers appear to be upgrading (unqualified) workers rather than bidding up (trade) wages, and this situation may be caused by some jobs not really requiring qualified tradespeople. Some, but not all, trade-related awards prescribe higher rates for adult apprentices.

On average, trade wages are distinctly lower than those for university graduates. NCVER (2001b, chapter 8) contends that trades and skilled vocational graduates are the 'next best paid' group after university graduates, commanding a large (71%) premium on average wages received by those with no post-school qualifications at all. In the core metal, electrical and building trades, the premium escalates further if the tradesperson also possesses a higher level diploma or degree qualification.

## Training pathway and delivery issues

'Traditional' apprenticeships may be characterised (NCVER 2001b, chapter 5) as a form of training having a contract of four years, a structured program with four days on the job and one day off (or equivalent in longer blocks), and an outcome of a trade certificate at level III under the new Australian Qualifications Framework (AQF).

By contrast, 'new' apprenticeships are offered across the labour market spectrum, lead to a full range of AQF qualifications, are flexible in length, offer choices of training provider and of undertaking all training on the job, and include options for school-based apprenticeships.

The NCVER report notes the emergence of part-time apprenticeships, the growth of school-based apprenticeships, the decline of public service apprenticeships and the resurgence of on-the-job training. These trends apply, if less intensively, to the traditional trades.

The report is correctly (rather than critically) making the point that training for the 'traditional' trades tends to be more prescriptive in its application than is new apprenticeship training generally. An important question here is the extent to which adult apprentices are receiving, or ought to receive, a similar prescription. Several recent reports are relevant to the development of new pathways, and possible adult pathways, in the trades.

Writing at an early stage of the post-1995 traineeship surge, and influenced by increasing cross-skilling in the trades, Malley (1997) considers alternative and more flexible 'two-stage' delivery models for entry-level training and new apprenticeships. The models include institutionally based training, traineeship-type training, and school–TAFE partnerships.

A later report (ANTA 2000a), commissioned to examine the extent to which training packages have encouraged flexible pathways into trades, finds some examples of these pathways occurring in practice.

The audit of training packages underpinning the ANTA report gives the impression that the packages have been fitted into the trades, rather than the other way around. The alternative pathways that are found do not appear to be affecting large numbers of apprentices or adult apprentices. They are said to be 'restricted and not common' in core metal and electrical trades, but 'more fluid' in automotive, construction, telecommunications and printing.

In the first group, the new pathways tend to involve minor variations on the conventional apprenticeship track, such as VET-in-Schools, school-based apprenticeships, and traineeships

within trades. While, in theory, post-1998 training packages (and State legislation) embrace all types of pathways to the trade-related qualifications, the reality is that non-apprenticeship pathways are uncommon under present industrial conditions.

The apprenticeship-type pathways that are found in the first group also occur in the second group, but they are accompanied by less conventional options that lie outside the apprenticeship track. These may include institutional training models, even up to certificate or diploma level, and front-end institutional training followed by industry work placements, not always within a formal apprenticeship.

The ANTA report finds that new pathways can be triggered by a variety of demand-and-supply factors, including skill shortages, structural change, particular high-skill needs, responses to new market opportunities, pushes to improve regional access to training, and improvements in training access for less customary supply groups (including adults).

Various blockages may impede new trade pathways. Some are particularly relevant to adult apprenticeships. These include State legislation that gives insufficient recognition to competency-based progression and post-trade articulation; VET funding gaps; lack of helpful award variations; poor availability of structured work placements; quality, assessment and articulation issues; inadequate trainer development in TAFE and industry; and under-rating of trade skills. Most trades are rated as certificate III, although a few are certificate IV.

A number of actions are suggested that might help overcome the blockages. These include promoting new pathways; a 'consistent and systematic approach' to the development of packages, pathways and attendant award variations; reconfiguration of employer incentives more in favour of newer and post-trade pathways; support for industry-specific new apprenticeships centres; and faster legislative reform.

To keep these 'blockages' in perspective, the ANTA report does make the point that non-apprenticeship pathways can lead to trade-type skill outcomes, and thereby help to overcome 'shortages' of such skills.

In electrical and electronic trades (see Electrotechnology Working Group 2000) and again in construction trades (NCVER & DEWRSB 2001), the numbers of VET enrolments in non-apprenticeship pathways to skills are estimated to be as high as those in apprenticeships. Especially in construction, with a high proportion historically of unqualified trade workers, students completing such pathways are quite likely to be employed or paid at trade levels.

Surveying metal, electrical and building trade employers, KPMG Management Consultants (1998) comments on the adverse impact of 'labour hire' firms on the core commitment of employers to apprentice training. The National Electrical Contractors' Association (NECA 1998) expresses concern at declines in electrical and electronics apprenticeships, suggesting, among other things, greater in-school promotion of technical careers and simpler mature-age entry to trades. The later Electrotechnology Working Group (2000) report and related NECA (2001) pamphlet on the same trades recommend more work on alternative pathways to trades, on electrotechnology projects within group schemes, and towards specific incentives and employer subsidies for emerging skill areas.

Hall et al. (2000) interviewed Australian employers and educators in metals and engineering industries, which are seen to need an increasingly responsive training system in the face of globalisation. Employers, they find, lack knowledge of the apparatus of training packages, including training pathways and competency-based training, and are tending to recruit rather than train. They are reluctant to make use of the Engineering Production Certificate, a traineeship-within-trade pathway that could be used by adult production workers.

Webster et al. (2001) are strongly critical of the training system's responsiveness to adult training needs, particularly in relation to pathways for unqualified, or underqualified, experienced adult workers in trades and related semi-trade jobs. New pathways, they contend, are not co-ordinated,

not rewarded in registered training organisations, not well provided for in training information and marketing, and not seriously collected in the training data.

Summing up, Saunders (2001, p.55) contends that overall progress on innovative training pathways over the 1990s is only 'moderate', although school-based programs are the shining exception. He summarises here the changing roles of training intermediaries (industry training advisory bodies, group training companies, and new apprenticeships centres) in developing training solutions and pathways for particular industries and employer types.

## Training quality and attrition

The quality of training available, particularly the quality of training providers, industry trainers, and training delivery mechanisms, may have a significant impact on the opportunities available for adult apprentices. Adults may benefit from different or more flexible delivery approaches if they are to survive the apprenticeship period and achieve the best skill and qualification outcomes.

The sheer magnitude of the traineeship surge since 1995 has led to quality concerns and State policy reviews (Schofield 1999, 2000). By contrast, there is sometimes an implicit assumption that trade training will be superior in quality to non-trade pathways or traineeship training.

A few researchers (Curtain 1996; Smith 1998) are critical of trade-training quality in terms of its occupational narrowness, or the ad hoc nature of competency acquisition and apprentice supervision. Two years into the full implementation of training packages and competency-based training, the ANTA (2000a) report raises some concerns about training assessment and trainer quality in the trades.

Considerable attention has also been devoted to the question of attrition or wastage rates as an indicator of trade training quality, perhaps at the expense of a more critical focus on matters of the quality and modernity of training infrastructure, pathways and delivery.

NCVER (2001b), citing the estimation techniques of Ray et al. (2000), asserts that 70% or more of trade (as opposed to traineeship) apprentices complete training, which compares quite favourably to equivalent completion percentages for university and other VET students.

Tracking individual Queensland apprentices from the 1994–95 cohort, Smith (2000) finds much lower completion rates in the trades. He is not convinced that his State is worse off than others. As it happens, the later Cully and Curtain (2001, p.6) analysis suggests it is better off than most in the case of trades, but not traineeships.

Corroborating Smith's point that little of the wastage occurs in the apprentice probationary period, Callan's (2000) Queensland study contends that surviving the apprenticeship is associated with the development of quality workplace relationships as well as quality training. His statistical evidence is that trainee non-completion is more common among the younger age groups, whereas with apprentices there is not much difference in completion rates between those aged under 25 on commencement, and those 25 and over.

The Senate Employment, Workplace Relations, Small Business and Education Committee (2000) regards non-completion as a significant wastage. Following Callan, the committee perceives poor-quality training in terms of on-the-job factors (access to trainers and staff, quality of peer support) as much as off-the-job factors.

The Cully and Curtain (2001) report, prompted by rising ANTA concerns over apprentice and trainee non-completions, is a recent major survey of the issues. Their behavioural analysis tends to defuse the non-completion and age-related non-completion issues for apprentices, if not for trainees. They find that non-completion falls considerably with increasing age for the apprentices surveyed, but not for the trainees. For those aged 25 or more, only 6% of the non-completers are apprentices and the rest are trainees. Apprentices aged 25 and more are a little more likely than

their younger colleagues to state that (where it occurs) non-completion was employer initiated and a little less likely to attribute it to job-related or personal factors.

Apprentice non-completers are found to have fairly similar employment outcomes to trainee non-completers, 47% being with the same employer or in a better job compared with 58% of trainees. The older the non-completers are, the more likely they are to stay with the same employer and the less likely they are to achieve a better job.

However, apprentice non-completers have considerably different training outcomes, 44% having recommenced training compared to only 11% of the trainees. The recommencement effect for apprentices, however, declines with increasing age. Twenty-seven percent of the 18–20-year-olds have recommenced, compared with 17% of those aged 21 to 24 and 7% of the group aged 25 and over.

Trainees, the report comments, are more inclined than apprentices to be relatively uninformed about training and to discount the value of the training and the qualification.

Offering suggestions to reduce non-completion, the report canvasses improving the fit between new apprentices and employers, improving the in-work experience, and providing better assistance for *older* new apprentices. The system is said (p.36) to be 'strongly oriented to the learning styles and operational needs of young people. Adult apprentices continue to face barriers to entry in the male-dominated traditional trades'.

On the completion side of the ledger, Harris et al. (2001) identify, from a literature survey, ten positive factors for training completion. These are: the apprentice or trainee's personal commitment; the support network; a good initial placement; related work experience beforehand; good supervisors; the workplace culture, real training opportunities; reliable transport to work; flexible career paths; and the value placed on the qualification.

Harris et al. (p.233) go on to develop a useful model for the process of retention, which seems to be applicable to the behaviour and outcomes for apprentices and adult apprentices in the trades. The significant point is that their model combines the three factors of personal attributes, labour market factors, and training quality, to explain good training outcomes.

## Supply-and-demand issues

Jenkins (1999) lists the Australian Industry Group (AIG) concerns with the training system as continuing system complexity, 'low' apprenticeship commencements, skill shortages (for top class tradespersons), and potential erosion of Australia's skill base advantage.

Employers may be more or less likely to engage adult apprentices in the traditional trades according to the extent to which they see such apprentices as contributing to the company's quality, skill base, productivity, profitability, and the alleviation of skill shortages.

As mentioned above, there is an increasing literature on the skill, profitability and business development spin-offs to the firm from training. Less in evidence are comparative analyses of the value to the firm of trade versus non-trade, or adult versus junior, training in alleviating skill shortages.

The generally low rates of apprenticeship commencement and completion over time form one of the most important single arguments for greater consideration of adult apprentices as another important supply source that could assist in gradually boosting training numbers.

Saunders (2001, p.45) notes that a number of the trades listed (DEWRSB 2000) as being in national skill shortage are 'perennials' that also appear in the equivalent list of 1987. The 'traditional' trades have had low and declining rates of training, or rates of replenishment, over time. The annual replenishment rate through formal apprenticeships was down to about 2% by 1995, with a similar rate in 2000 (see table 3).

Recent strategic reports are available on supply–demand issues and skill shortages for the four key trade groups under consideration in the present report.

In 1999, the Commonwealth Minister responsible for VET established (see RIWG 2001, p.11) the National Industry Skills Initiative (or Forum) to determine what steps industry and government could take to address industry skill shortages.

The first three industries reported on were engineering (AIG 2000), electrotechnology (Electrotechnology Working Group 2000), and retail automotive trades (VACC 2000). The first two reports tend to emphasise actual skill shortages in key trades more than the third.

The Skills Initiative has listed 12 themes common to the skill solutions proposed in these first three reports. These relate to: the adoption of the learning culture; improving the industry image; promoting careers; reviewing the activities of new apprenticeships centres; promoting new training pathways; recognising prior learning (RPL); retraining the workforce; improving workplace relations; streamlining regulatory frameworks; reviewing employer incentives; migration issues; and boosting industry information and analysis. A few of these themes (particularly new pathways, RPL and retraining) are significant for adult training.

A later report (NCVER & DEWRSB 2001) deals with skill shortages in the building trades, the fourth key group under consideration here. Although, as noted in the statistical discussion above, there has been a steady increase in training numbers since 1995, this is not leading to increases in completions. Following Webster et al. (2001), the report notes that these trades exhibit high proportions of qualified people working out of trade coexisting with similar proportions (40% or more) of unqualified people working in trade.

The report calls for opportunities for (post-trade) up-skilling into supervision and management. It is argued that, as low apprentice completions may continue, emerging skilled job vacancies may need to be sourced from non-apprentice pathways, from re-entry of qualified workers, or through migration.

**Table 3: Apprenticeship completions (C), trade workforces (W) and rates of training (R) in 'traditional' trades, 1986(1) , 1995 and 2000**

| Trade group | 1986(1) | | | 1995 | | | 2000 | | |
|---|---|---|---|---|---|---|---|---|---|
| | C ('000) | W ('000) | R(2) (%) | C ('000) | W ('000) | R (%) | C ('000) | W ('000) | R (%) |
| Mechanical trades (ASCO 41) | 12+(3) | 250+(3) | 5%(3) | 4.65 | 206 | 2.3% | 5.05 | 206 | 2.5% |
| Automotive trades (ASCO 42) | | | | 3.65 | 138 | 2.6% | 4.85 | 145 | 3.3% |
| Electrical and electronics trades (ASCO 43) | 6.5+ | 120+ | 5–6% | 3.65 | 180 | 2.0% | 3.50 | 195 | 1.8% |
| Construction trades (ASCO 44) | 6+ | 175+ | 3–4% | 4.25 | 261 | 1.6% | 4.45 | 290 | 1.5% |
| All 'traditional' trades | 24+ | 545+ | 4–5%(1) | 16.2 | 785 | 2.1% | 17.9 | 835 | 2.1% |

Sources: For 1986, DEIR (1986). For 1995 and 2000, unpublished NCVER statistics for completions of apprenticeships and DEWRSB (2000) for employed workforce

Notes:
(1) 1986 was a peak year for apprenticeship completions, not exceeded again till 1993. The equivalent rate R for 1987 is lower, of the order of 3–3.5%
(2) Formal apprenticeship completions, divided by workforce, as a percentage. Does not count other forms of VET course or informal skilling that may contribute to the trade workforce, especially in construction
(3) First three figures across this row for 1986 are for mechanical and auto trades *combined*

# Summary

In the 1990s, the dramatic shift in Australia's training system has been the growth surge in traineeships. Traineeships have come to occupy half of all contracts of training. From mid–1995 to mid-2000, the overall number of 'new apprenticeships' has doubled to about 275 000, and the general profile of training has shifted much more towards adults and women.

Within this, the trades can be said to be holding their own, certainly in training numbers and to a very great extent in their shares of the workforce. Between mid-1995 and 2000, the numbers in training in the whole 'trades and related' group moved from 120 000 up to 140 000 and annual training completions increased from about 23 000 to 26 000 and more.

The 'traditional' trades that are the main focus of this report comprise about two-thirds of all training in the whole trades group. Their numbers in training have increased a little, from about 83 000 at the end of 1995 to 86 000 at the end of 2000. Some of these trades show continuing signs of under-replenishment or labour market shortage, indicating room for further growth.

For the over-25s, the share of training in the 'traditional' trades has climbed from 8% in 1995 to 12% in 2000, following much the same pattern as for the whole trades group. The system of training for 'traditional' trades is still 'strongly oriented to the needs of young people,' comment Cully and Curtain (2001). 'Adult apprentices continue to face barriers to entry'. The share of 'traditional' trade training held by women is static on 1% in 2000, as compared to 13% for the whole trades group.

The new apprenticeships system and the Australian Recognition Framework have been implemented from 1998. New or revised concepts and programs, such as VET-in-Schools, 'user choice' of training providers, new apprenticeships centres, training packages and competency-based training, impact on trade training and its accessibility to adults.

The current interest in 'adults in trades' appears to arise from general observations about the ageing of the population and supply and demand in the trades, rather than specific prescriptions for adult training to be found in national VET policies. There are views that young people should maintain some of their historical position of priority in apprenticeships and traineeships.

Traditional trade training is held to be a high net cost to the firm, but employers appear to discount this in favour of post-trade expectations and social commitments to training. The cost–benefit equation tends to shift to a benefit for the firm in year four of the indenture.

The firm is estimated to pick up more than half of the cost of apprentice training, a large proportion of the remainder falling to the apprentice rather than to government. Studies query the sense of shifting training costs further towards trade apprentices. At the margin, the employer incentives program offsets costs to employers, but there is no extra offset for adults. While employers must carry 'high' rates that are prescribed for adult apprentices in some awards, and qualified trade wages are 'high' relative to those for unqualified adults, adults with trade and skilled vocational qualifications earn less than university graduates.

Training for the 'traditional' trades remains more prescriptive in its application than that for other 'new apprenticeships'. A recent ANTA report documents the cautious application of alternative pathways to the traditional trade occupations. This and other recent reports suggest actions to unblock skill pathways and skill shortages. These include more consistent approaches in training packages to training pathways and attendant award variations, reconfiguration of new apprenticeships centres or employer incentives, incentives for emerging skill areas, or simpler mature-age entry procedures. Non-trade pathways to trade-type skills are significant in electrical and construction, and can alleviate skill shortages.

Wastage from trade training remains a concern, but a major sample survey (Cully & Curtain 2001) suggests that the risk of apprentice (not trainee) non-completion falls away for those aged 25 or more. A significant percentage of apprentice, unlike trainee, non-completers recommence training elsewhere.

Annual replenishment rates in the 'traditional' trades have only been about 2% over the past five years. If it is taken that adult apprentices are more likely to complete training, then they are a potentially valuable alternative supply pool to help alleviate perennial labour shortages.

Recent National Industry Skills Initiative reports on skill shortages in metal, electrical and auto trades give some prominence to adult training issues in the common themes and solutions identified. A 2001 (NCVER & DEWRSB) report on the building trades calls for greater post-trade (for adults) and non-apprenticeship skilling opportunities to address skill shortages.

# Getting adults into the trades: The case studies

This report studies firms' approaches to encouraging and accommodating adult (especially aged over 25) apprentices in the traditional trades. The two major components of the report are an examination of the statistical and research evidence and case studies of firms employing adults in trades. This chapter summarises the results of the case studies.

The first section of this chapter explains how the 16 case-study firms were selected and summarises their industry and apprenticeship profiles. The other sections discuss in some detail the comparative results of the case studies. For purposes of comparison, the case studies are examined in terms of companies' management of training, recruitment and selection processes, attitudes to training intermediaries and incentives, costs and wages for (adult) apprentices, training delivery and pathways, and training approaches to, and future expectations for, the over-25s. Also summarised are the views of company training providers and a sample of the adult apprentices themselves.

## Background to case studies

This section explains the rationale for the selection of the firms studied, outlines the methodology, and summarises the industry and trade details for the firms that responded.

### Selection of case studies

There being a relatively small amount of available and relevant research on adult apprenticeship characteristics and trends, the starting point for the case studies was to concentrate on known employers of adult apprentices. That is to say, no control group methodology was adopted in the study. Firms that did employ adult apprentices (or trained them well) were not compared with those that didn't (or perhaps didn't train them so well).

The expectation was that there would be substantial variation in training practices and views among firms that did employ adult apprentices. There would also be a substantial amount to be learnt from them in terms of how well the system was or was not working.

The firms chosen were 'flagship' companies with some known degree of commitment over time to adult apprenticeships, although this does not necessarily imply higher-than-average adult shares of apprenticeships. The rationale was that the issues these companies generated could also be assumed to apply to other companies with less commitment to adult training.

From this starting point, there was a search for up to 20 'reasonably representative' companies employing adult apprentices in traditional trades. The traditional trades were taken as mechanical, auto, electrical and construction, four of the five biggest trade groups.

Food trades, the fifth group, was not included, to keep the research compact, but also because 'traditional' trade occupations are less prevalent in this group. Similarly, agricultural and 'other' trades were not included, apart from one printing firm.

'Representative' was taken to mean that the companies chosen would be employers of adult apprentices in several different States, covering a variety of large and small firms, and a range of the traditional trades. To balance the case studies, the views of training providers and apprentices would be sought along with those of employers.

To assist in this regard, State training agencies (New South Wales, Queensland and Tasmania) offered access to adult apprenticeship records that would lead to likely employers. To these data bases were added leads from employers, employer bodies, training providers, training documents and websites, and other local knowledge.

In this way, about 30 firms were approached nationally. A version of the question sheet used is in the appendix. Generally speaking, companies were given a reasonably open hand to talk about factors that might or might not encourage them to take on adult apprentices.

Sixteen of the 30 firms participated, a 50% response rate. The firms that did not participate appeared to be fairly similar in their industry and size dispersion to the firms that did. They included five or six group training firms, five manufacturers, two electricity firms and two transport firms. Where given, reasons for non-participation usually related to the pressure of business or the response burden, but sometimes it was a simple absence of adult apprentices.

Case studies were conducted in the second half of 2001. All States and the ACT were represented, a variety of large and small firms and group training schemes was surveyed, and the four major groups of traditional trades were well-represented. On average, the companies were also fairly representative (see below) of the national situation, in terms of the shares of their apprenticeships held by those aged 25 and over.

The case studies are summarised and interpreted in this report. They also appear in full in the supplementary NCVER website publication *Getting adults into the trades: Case studies*, which is available at www.ncver.edu.au

## The firms surveyed

Table 4 displays the basic details for the 16 firms surveyed in the case studies. Two to three firms were surveyed in each State and Territory, except for Tasmania (1) and Northern Territory (0). The most common industries of the firms surveyed were group training schemes (5), manufacturing (5), electricity supply (2) and retail automotive (2).

Leaving aside the five group schemes, three of the eleven firms had more than 1000 employees, four had 1000–500, three 500–100, and one 100 or less. Of these 11 firms, one carried more than 500 tradespersons, three carried 500–100 and seven carried less than 100.

Of the 16 firms and group schemes together, one carried more than 500 apprentices, five carried 500–100, and ten carried less than 100. Only six firms carried 10 or more adult (over 25) apprentices, with the other ten firms carrying less than ten. The total number of apprentices in the over-25 age group represented in table 4 is about 125 (7%), but at least twice this number would be over 21.

In other words, the average share of the over-25 age group in the surveyed companies' apprenticeships was actually below the national average of 12% for the traditional trades. In five companies, however, the over-25s' share of apprenticeships was between 20% and 50%.

Only five companies mentioned women apprentices, and only one pointed to a specific recruitment strategy for adult women. The total number of female apprentices in the survey would only appear to be about a dozen, less than 1% of the over 1800 apprentices in total.

The firms surveyed most commonly employed electrical, or metal and electrical, trades (eight firms). Other trades covered were construction, auto, aeronautical, printing, and 'various'.

The employers in table 4 are reasonably representative of the trade training mix in the general workforce, noting some over-representation of construction trades relative to others and group training schemes relative to ordinary employers of apprentices.

**Table 4: Employers of adult apprentices in the case studies, by State, industry and 'traditional' trade characteristics, 2001**

| Employer | State | Industry | Employee numbers | Trades, apprentice, and adult apprentice, numbers(1) | Trade types |
|---|---|---|---|---|---|
| Crane Copper Tube | NSW | manufacturing | 340 | 40, 17, 4 | metal, elec. |
| 'Auto component firm' | Vic | manufacturing | 2000 | 200, 60, 5(3) | metal, elec. |
| MEGT | Vic | group training | n/a | n/a, 400, 9(3) | various |
| Flight West (4) | Qld | air transport | 250 | 45, 15, 3(3) | aeronautical |
| BIGA | Qld | group training | n/a | n/a, 550, 40 | construction |
| Hamersley Iron | WA | mining | 2200 | 850, 100, 5 | metal, elec. |
| Wesfarmers CSBP | WA | manufacturing | 570 | 40, 9, 1 | metal, elec. |
| Westpower | WA | electricity | 300 | 60, 21, 7(2) | electrical |
| Electrolux | SA | manufacturing | 1500 | 50, 18, 8(3) | elec. metal |
| Griffin Press | SA | manufacturing | 160 | 20, 15, 5-6(3) | printing (5) |
| MTA Group Training | SA | group training | n/a | n/a, 330, 12(2) | automotive |
| Elwick Rd Bodyworks | Tas | retail (auto r'pr) | 7 | 3, 2, 1 | automotive |
| ActewAGL | ACT | electricity | 800 | 250, 40, 2(3) | electrical |
| ACT MBA GpTraining | ACT | group training | n/a | n/a, 100, 10(3) | construction |
| ACT Electro Group | ACT | group training | n/a | n/a, 75, 12(3) | electrical |

Notes:
(1) 'Adult' generally refers to those aged 25 and over, unless otherwise indicated
(2) 'Adult' refers here to those aged 21 and over
(3) These companies are known to have at least twice as many adult apprentices in the 21-plus age bracket as are indicated (by the third figure of this column) for the 25-plus bracket alone. A complete count of the over-21s was not, however, attempted
(4) Employment and training numbers since affected by the Ansett Airlines collapse
(5) Printing is not in the four trade groups that are the statistical core of this report. However, qualitatively speaking, it may be regarded as a traditional-type trade and, quantitatively speaking, the numbers here are not large compared with those represented by the other 15 firms

There is a reasonable balance in terms of the distribution across the chosen four main 'traditional' trade groups: mechanical, automotive, electrical and construction. According to NCVER (2001b, table 22, p.65), the total numbers of apprentices in these four groups are in the proportions 20%, 26%, 20% and 33%. In table 3, which represents a total of about 1800 apprentices, the proportions are (up to) 15%, (up to) 25%, (up to) 15% and (up to) 50%. The over-representation in construction arises from the inclusion of one large group scheme.

About half of the apprentices surveyed are employed with group schemes and half in private sector firms. This exceeds group training's overall share of traditional trade training.

# Employers' training perspectives

The survey of firms (see appendix) was designed to elicit a general picture of the manner in which firms conduct training, and especially training for adults and the over-25s. This includes aspects such as:

- ✧ firm size, numbers of tradespersons, apprentices and adult apprentices (covered above)
- ✧ company training management, including choice of training provider
- ✧ apprentice recruitment and selection processes
- ✧ attitudes to, and uses of, training intermediaries and incentives
- ✧ costs of (adult) training, and industrial relations practices
- ✧ training pathways and delivery for apprentices (especially among the over-25s)
- ✧ expectations of future trade and apprentice trends (especially among the over-25s)

The formal brief for this report refers to adult apprentices over 25 years of age. The 25-year mark is commonly used in education and training research as an indication that an individual will have

completed his or her first major transition from youth through education and employment to some form of career and economic independence.

The age statistics in the previous chapter refer to over-25s in training, although many of these individuals may have actually commenced training in their early twenties. In the case studies, information has also been collected on training and training trends for the over-21s, this being a common indication for employers and in awards that the individual is an adult. Several companies employed twice as many over-21 apprentices as over-25 apprentices.

## Management of training

In the companies surveyed, there is usually a designated director of apprentice training, referred to as the training manager, apprentice manager, work practices manager or similar. The usual impression is that the director is a middle manager, rather than a senior executive.

Group training schemes often have field or operational staff to assist the identified training manager. Where group schemes run their own off-the-job training, a common presentation is that apprentice training is co-managed by the on- and off-the-job training managers.

Companies, including the group schemes, exhibit a slight drift away from TAFE as the main training provider, but about half still use TAFE to provide some or all off-the-job training.

Of the six big firms (500 plus employees) surveyed, Gough and Gilmour, and ActewAGL, use TAFE as the main or sole provider. Three others have recently outsourced apprentice training primarily (for all but existing, adult employees) or exclusively to group training schemes. One, the Victorian components firm, conducts its own basic off-the-job training, but has a relationship with RMIT for the development of higher-level post-trade training.

Three of the smaller (less than 500 employees) use TAFE exclusively. One uses a group training scheme and another, Flight West, sends its apprentices to an industry-wide aero trades school.

The group training schemes tend to maintain their own skills centres or academies for the purposes of off-the-job training. ACT Electro Group uses a skills centre for one trade (linespersons) and TAFE for the other (electrical). MEGT, which unlike the other four schemes services a whole variety of trades, finds it more economical to send apprentices to a variety of Melbourne TAFEs according to trade and job location.

## Recruitment and selection processes

The companies surveyed draw on a variety of applicants and a variety of pathways to recruitment. In practice, this means that recruitment is opened up a little more to adults as well as the traditional type of recruit, the male school leaver with Year 10–12.

Companies do not as a rule have specific adult recruitment strategies or intakes, commenting that adults can compete in their general intakes. One large WA company, Hamersley Iron, has specifically asked its group scheme to develop an apprentice recruitment strategy for adults and for women. Some companies welcome existing (adult) employees who want to transfer into apprenticeship. Two companies rely heavily on them. In one of these two cases, the existing employees are tried and tested casual employees.

Standardised aptitude tests and personal character interviews are often mentioned in the recruitment process. In some cases, the tests are outsourced to the company's group scheme or conducted with the assistance of a local industry training advisory board (ITAB).

Among the big companies, two still get their apprentice recruits from a traditional type of advertised annual intake that primarily attracts male school leavers, and a few adults. Three other big firms have outsourced most recruitment to their group schemes, which draw on school leavers (with VET-in-Schools program, school-based apprenticeship or pre-vocational

experience) and also adults (with industry experience). However, these three companies leave the door open for existing (adult) company employees to transfer into apprenticeship.

The smaller companies use a variety of approaches. One, Flight West, finds that its reputation and an annual advertisement in a Queensland Department of Education publication are sufficient to attract a surplus of school-leaver and adult applicants to be tested for its available apprenticeships. Crane Copper conducts its own recruitment, but works off a short list compiled by an outside recruitment agency. Another smaller firm has outsourced recruitment to its group scheme, and the other two rely very much on the pool of existing employees (casual or permanent) for apprenticeships.

The five group schemes appear to have two broad types of recruitment strategy. One is a more traditional approach, culling and testing those who respond to an (annual) public advertisement. Also common is a reputational strategy, relying more on direct approaches from potential apprentices (school leavers, pre-vocational graduates, adult workers, out-of-trade apprentices) or employers of apprentices.

## Uses of training intermediaries and incentives

One significant use of training intermediaries is that, as noted above, several of the companies have outsourced some or all apprentice training to group schemes. One or two companies note industry training advisory board assistance in aptitude testing of apprentices.

A few companies mention the Department of Education, Training and Youth Affairs, (now Department of Education, Science and Training [DEST]), new apprenticeships centres (NACs), which are responsible for the signing up of all apprentices and for other State and Commonwealth administrative and subsidy aspects. In one or two cases, there is a feeling that NACs are not highly value-adding, or that the company (group scheme) could undertake this role itself.

Some concerns are raised with the Commonwealth employer incentives scheme (DETYA 2001), which provides commencement and progression payments to qualifying employers of apprentices and trainees. The more adult-friendly group schemes, which might otherwise sign on more (adult) apprentices, note that existing rules preclude them from the final 'completion' payment, which goes to employers on completion of the apprenticeship. The withholding of this final payment may be regarded as a trade-off for the other kinds of financial support that the Commonwealth provides to group schemes.

Another group scheme expresses concern that adults, who are more likely to already possess other qualifications at certificate III or above, may thereby find that the rules preclude their employers from attracting the Commonwealth employer incentive.

Only a few employers in the case studies consider the State Government side of policies and support for apprenticeships, although this may have a significant impact on the recruitment and retention of (adult) apprentices.

BIGA (Building Industry Group Apprenticeships) acknowledged support from the Queensland Government's Building and Construction Industry Training Fund. Griffin Press in Adelaide was concerned at the withdrawal—if the apprentice had already been with the company more than 12 weeks—of a substantial (90%) State Government 'user choice' related subsidy for training materials and other expenses.

One employer, Wesfarmers CSBP in WA, drew attention to the impact of State Government administrative (as opposed to funding) procedures. It felt that a lot of 'red tape' was attached to adult apprenticeships, the lack of clear documentation creating possibilities for unnecessary repetition or incorrect starting points in the off-the-job training for experienced adults.

A broad-ranging comment on government policies was received from the Victorian auto components supplier. Having a stronger interest in technology-driven and post-trade training, it proposes three types of action to support adult apprenticeships. These are: better support for post-basic (degree-diploma) trade training; better support for company (training) infrastructure and equipment; and (scholarship) support for industry experts re-skilling as technology teachers.

## Training costs and industrial relations issues

Industrial relations attitudes and practices towards (adult) apprentices vary. As in the previous section, the practices are difficult to correlate with the size of the enterprise. They perhaps relate more to the company training ethos and the particular trade groups employed.

A key issue is how companies respond to the industrial 'catch 22s' of adult apprenticeships. Adult apprentice wages (see below) may be simultaneously too 'high' a cost for the employers but too 'low' a subsistence for the apprentices. Adult apprentices, usually carrying greater financial and family responsibilities, may suffer significant loss of income on apprenticeship wages. To reduce or overcome this disadvantage, companies may offer skilling incentives or employment incentives, particularly in terms of reductions in indenture time and enhanced wages or earnings.

The auto components firm and the aviation firm are not keen on accelerated completion for their adult apprentices. They tend to offer instead, as incentives to adult apprentices, the prospect of high levels of skill outcomes, or, a related aspect, the prospect of possessing higher level achievements and above-average resumes on completion of trade.

Compensating adult apprentices by acceleration of wages and competencies (that is, moving adult apprentices through the applicable wage and competency levels for that trade more quickly than their junior counterparts) is not as common as one might expect, applying to only three or four companies. This is perhaps a surprising result, as acceleration is potentially a means of faster company skill formation that also contains the overall cost of training to the firm.

Part of the explanation may be that, in the face of limited market penetration of training packages, previous customs prevail and the four-year term continues to dominate. At the end of 2000, there appears to be a total of about 25 000 apprentices in training under the key traditional trade-related training packages (NCVER 2001a, table 5). This represents less than 30% of the 86 000 apprentices in total (see table 1) for that year.

It might be thought that companies more used to training packages and practising more adventurous forms of acceleration were less represented in the case studies. There was little evidence that companies contacted, but not participating, were much different in this regard. These non-participants were spread across fairly similar industries to the participants and, on initial contact, appeared to have much the same range of training practices.

As Hamersley Iron points out, adult apprentices (especially if accelerated through training) also offer a time-honoured means of addressing peak-demand skill shortages in the trades. Similarly, Gough and Gilmour has upped its overall apprentice intakes to combat trade shortages, and would have done likewise with adult apprentices had more been available.

Electrolux in SA has supported competency-based wage progression, but this may change with outsourcing of training to a group scheme. A few companies are willing to post adult apprentices straight into the applicable second- or third-year apprentice rates, and a few are willing to 'sign off' their apprentices as qualified tradespersons inside four years. Generally, reductions of term are only 6–12 months, although two isolated instances of larger reductions were found in metal and auto trades.

About six (other) companies use a sensible strategy to compensate financially adult metal–electrical and auto apprentices who are existing employees. This involves ignoring the apprentice wage and leaving them on their applicable company wage for the duration of training.

If that is not possible, adult apprentices can sometimes lift their earnings substantially, especially in the difficult first and second years of the indenture, by undertaking more overtime or other casual non-apprentice work. Gough and Gilmour, while counselling adult apprentices about reduced wages, offers them 'unlimited' overtime as compensation.

Companies vary significantly in the extent to which the higher wages that may apply to adult (over-21 rather than over-25) apprentices are seen as a barrier to employing adult apprentices. About six companies, employing several different trade groups, mention low adult rates, but this is not usually perceived to be an insurmountable disincentive, or something that needs to be remedied by extra government wage subsidies.

There is a matter of perception here. Wage rates unattractively low to the apprentice (relative to higher adult wages generally) may at the same time be unattractively high to the employer (relative to lower junior apprentice wages). This is a factor with the group schemes BIGA of Brisbane, MTA of Adelaide, and (to some extent) MEGT in Melbourne.

MEGT notes that relevant awards only specify (higher) adult rates for their metal and auto, not electrical and construction, apprentices. This, MEGT comments, may appear to suit policy objectives and the apprentices themselves, but it may not suit the group scheme as higher wages increase the difficulty of organising rotations with 'host' employers.

In view of the Australian workplace relations reforms of recent years, surprisingly little mention is made of enterprise bargaining agreements (EBAs) as a flexible tool for the recruitment and remuneration of adult apprentices. Generally, the companies (and relevant unions) appear to be following fairly closely the relevant (usually State rather than federal) awards for their adult apprentices.

Griffin Press in Adelaide, with an established practice of converting casual company adult employees into permanent company apprentices, comments on the adverse impact for adult apprentices of a recent award change, forcing the permanent employment (or release) of any casual employees who go beyond 12 weeks with the company.

While the sample is small, the case studies suggest that EBAs and award variations are not being framed to allow reasonable leeway for the promotion and pursuit of adult apprenticeships. Some companies and adult apprentices have adopted their own strategies to counter the impediments thereby created.

## Training pathways and training delivery

As a generalisation, not as a criticism, the employers of adult apprentices in the case studies could be said to favour fairly traditional forms of training delivery and traditional training pathways for their (adult) apprentices. Roughly speaking, that means following a middle path through the applicable training package for about a four-year period on fairly standard apprentice wages with standard forms of off-the-job training on day or block release.

Within that, there may be a number of practical training adaptations and innovations that can serve the interests and training needs of adult apprentices.

As already noted, some innovation is visible at the recruitment stage. Only a few companies still rely on traditional once-a-year intakes of (male) school leavers. The majority has outsourced recruitment to their group schemes or other agencies (ITABs), and/or are more inclined to recruit from a variety of sources, including VET-in-Schools graduates, school-based apprentices, pre-vocational and traineeship graduates, approaches from adults themselves who have prior industry experience or educational qualifications, and so on.

One company arranges for its apprentices to spend a 10–12 week induction period effectively off the job before they go out to employment. A few companies note that rotation through different

departments or extra project work is important in terms of broad-banding skills and achieving competencies across the breadth of units in the training package.

Of course, 'rotation' through different host employers is a given in the case of group scheme apprentices. However, both group schemes and companies admit that there is a temptation to leave good apprentices and adult apprentices with one employer (department) for long spells, which may increase short-run company productivity and apprentice overtime earnings at a cost to long-run apprentice skills and competencies.

Off-the-job apprentice training is conducted on day release (for example, in some metal and electrical trades) or block release (for example, in aeronautical, electrical, building and printing trades). Griffin Press in Adelaide, Hamersley Iron in WA, and the ACT MBA scheme, note that experienced adult apprentices may be able to complete training blocks (training weeks) a day or two early, enabling them to return to the job early and possibly hastening their overall rate of progress through off-the-job training requirements.

The Victorian auto components supplier has developed a model of training delivery and training progression (see below) that is attuned to the prior experience and future career interests of adult apprentices. This model looks toward 'dual-ticketed' or multi-skilled tradespersons, integrating traditional metal and electrical trade skills. Crane Copper, Hamersley, and Wesfarmers, exhibit similar kinds of approaches.

## Adult training, and overall, trends

Companies tend to train their over-25 (or over-21) apprentices in a manner similar to that for their junior apprentices. The Victorian auto firm contends that adults ought to be exposed to the same mix of 'theory, project and assessment' work as junior apprentices. Other firms (Flight West) or group schemes (ACT Electro Group) are explicit that adults should go through similar training programs to juniors.

However, as discussed above, induction and training are modified to some extent to meet the needs of adults. Firms may use different recruitment pathways for adults. Juniors are more likely to come in as VET-in-Schools or pre-vocational graduates; adults as existing company workers. There is a certain amount of acceleration through the customary stages of training and levels of apprentice wages, but it is unusual for adults to receive sufficient recognition of prior learning or current competencies to shorten the apprenticeship by more than a few months. Where adults are existing employees, or in trades with prescribed adult rates, they may occasionally be placed on a different (higher) wage to other commencing apprentices.

As apprentices, adults are usually claimed to have advantages over juniors in terms of maturity, dependability and commitment to training. They are said to be role models, exerting a steadying influence on the juniors around them. They are more inclined to observe safety requirements where these are crucial (for example, aero and electrical trades).

Gough and Gilmour finds that their adult auto and electrical apprentices have the maturity to relate well to customers in the field, an important attribute for a retail sales and repair company. ACT Electro Group notes that adults may be suited to the increasing complexity of electrical trades and the increasing amount (half or more of total work time) of low-voltage (computing and networking) work now required. This latter point, it might be added, is an example of a traditional trade maintaining its occupational cohesion (not deskilling) yet radically changing its internal workings in the face of technological change.

Where adult apprentices are existing employees, companies say that they are giving them a development opportunity, the pay-off being a skilled workforce that can do work of higher quality or profitability. Hamersley Iron cites four specific advantages of adult employees as apprentices. They are lower risk in safety terms, are known quantities, are already familiar with the company culture, and have prospects of finishing training more quickly.

The negatives with adult apprentices may include their time out of the educational system, their fixed modes of working, or less ability to adapt to new technologies such as computing. These are not cited as major disincentives to adult apprenticeship, certainly not compared with 'high' (relative to juniors) adult apprentice wages. Employers linked with the auto group scheme in Adelaide point out that differences in learning capacity between individual apprentices may outweigh adult–junior learning differences generally.

A majority of the 16 companies venture to estimate completion rates for adult apprentices. As with their other apprentices, these are generally said to be in the 95–100% range, much higher than Australian averages. Only two companies, both group schemes, estimate their adult completion rates at 75% or less, more comparable to Australian averages.

There may be an element of self-inflation, although some of the employers surveyed are in industries (electricity, aviation) known to have very high completion rates. In any case, the proportion of adults completing training genuinely appears to be as high or higher than the proportion of juniors so doing.

A majority of the companies expect that the adults' share of their apprenticeships will change little over the next two to three years. Very few expect an actual decrease in the adults' share, and few would expect any increase. BIGA, the Brisbane group scheme, expects its numbers of adults to decrease despite an overall increase in numbers, the reason being that host employers do not see that adults have the extra skills that would justify a wage premium.

# Providers' and apprentices' perspectives

In the majority of the 16 case studies, a separate view was obtained from the training provider (if separate from the employer) and from one or two of the adult apprentices (22 named apprentices in total interviewed). This section summarises their views.

## Training providers and their views

As noted above, about half of the companies use TAFE for some or all of their off-the-job training, there being a slight drift toward non-TAFE providers. Despite that, TAFE emerges from the case studies with a generally positive vote from employers and apprentices as a provider prepared to make classroom, teaching, and interpersonal adjustments that will smooth the way for adult apprentices.

TAFE and other training providers generally welcome the presence of adult apprentices in their classes. They are said to be mature, committed, and more able to work under self-paced learning with minimal supervision, seeking assistance only as required.

ATAE, the non-TAFE college for the Flight West apprentices, summed up their adults as committed, motivated, mature in outlook, and attentive to critical aviation maintenance detail. The academy for BIGA, the Brisbane group scheme, is more laissez-faire. It neither encourages nor discourages adults who wish to complete pre-vocational courses. Adults are harder to place with employers, and age is not seen as a prime indicator of learning capacity.

Some adults have special learning needs, such as computer literacy (Douglas Mawson TAFE for the Griffin Press) or literacy and numeracy (the TAFE provider for Wesfarmers CSBP).

TAFE and other providers do not make an urgent case for significant variations in adult learning programs, or for recognition of prior learning (RPL) that would lead to a significant reduction in term for adult apprentices. In two cases, RPL leads to heavily reduced terms, but the more likely event is that adults will be permitted to complete individual blocks of learning or units of competency early.

The provider for Westpower expects reductions in term to become much more common upon the full implementation of the Electrotechnology Training Package and its competency-based training paradigms. RMIT apprenticeships, in association with the Victorian auto components firm, is strongly in favour of greater acceleration for adults and better provision for them through group training and in employer incentives.

An unexpected characteristic of adult apprentices, prominent in training provider comments, is their positive effect on the social dynamics of the classroom and off-the-job training. The adults are said to exert a steadying and mentoring influence on younger colleagues and their behaviour. They tend to be more appreciative (MEGT comment) of the learning and career opportunities and communicate this (TAFE provider for Crane Copper) to younger apprentices.

The positive influence extends to the classroom, where adults can be placed together (Douglas Mawson) for solidarity and can raise the general standards of class behaviour, participation, and discussion. They can be also be paired (provider for Hamersley Iron) with younger 'problem' students to stabilise them. This positive effect cuts both ways. The adults are in an environment where they can learn and are less likely to feel discomfort about age differences or time out of formal education.

In an informal, low-cost setting, the Skills Centre for the ACT MBA group scheme has adapted the delivery of the Construction Training Package, dividing it into about 15 modules or skill clusters. Adult apprentices, often ex-builders' labourers, are encouraged by a flexible, not overly academic, learning environment. The centre's manager emphasises the need for 'pastoral care' attuned to adults' more taxing family and financial circumstances.

As an off-the-job training provider, the Victorian auto components supplier monitors all apprentices closely for competencies and marks achieved, feedback from customers, and progression through to qualification and employment. It intends to move towards an integrated 'mechatronics' curriculum that, by blending the Metals and Electrotechnology Packages, is more attuned to company prospects and skill needs.

As with Electrolux in Adelaide, the adult apprentices may benefit from the auto company's deliberate focus at the outset of training on the post-trade (diploma, degree) areas beyond the apprenticeship. RMIT, the post-trade provider associated with the auto components supplier, makes the point that adult apprentices could also constitute a much-needed source of recruits to meet growth and replacement needs in trade teaching.

Two or three providers suggest that extra government support (on-the-job placement support, extra apprentice income support, or extra employer incentives) might boost adult apprentice numbers. In this context, the existing roles of new apprenticeships centres and new apprenticeships employer incentives have already been noted. Extra pre-vocational training for adults may also boost their apprenticeship chances, but there is always the risk of not finding a suitable employer thereafter.

## Adult apprentices and their views

The adult apprentices have a variety of backgrounds, including university study, pre-vocational and other VET study, qualifications in other trades, a variety of adult jobs, prior semi-skilled employment with the company, and so on. Career aspirations, broadening the skill base, higher earnings for family responsibilities, and a liking for the employing company, are common motives for undertaking an adult apprenticeship.

In two firms, the Victorian auto firm and Flight West in Queensland, dissatisfied ex-university (or VET) students were using the opportunity of an apprenticeship in a 'prestige' trade to get their careers back on track. Previous Flight West apprentices had in fact gone on to complete professional qualifications. BIGA noted that its apprentices might have professional backgrounds, labouring backgrounds, or be previously unemployed.

The Gough and Gilmour interviewee, something of a 'high flier', had already completed one trade, but felt that adding another to his repertoire would give him an edge over his contemporaries undertaking university studies. Other apprentices interviewed already had one trade, but were now undertaking another. In such cases, metal trades (fitting or boilermaking), to electrical (electrician or auto electrician) trades, is a common progression.

If adults are not existing employees, undertaking pre-vocational or similar studies may boost their chances of getting an apprenticeship. In a number of companies (Crane Copper, Wesfarmers, Electrolux, Griffin Press and Elwick Road Bodyworks), the adult apprentices interviewed were existing trades assistants or casuals upgrading their qualifications.

As for the ex-university students, an adult apprenticeship is sometimes seen as a welcome 'second chance' in life. The adult apprentice at Elwick Road Bodyworks had taken a 'third chance' to qualify, having been ruled out of early apprenticeship by literacy difficulties and discouraged from later 'tradesmen's rights' accreditation by the complexity of the process.

If adults are required to take a wage cut to commence an apprenticeship, then it is a significant disincentive. A few adult apprentices said that they would simply have been unable to proceed had they not been able to keep their existing company wages. Others reluctantly accepted a wage cut, rationalising that they could make up the income by doing overtime during apprenticeship, or that there would be compensation through increased earnings and career opportunities on completion. Where the 'low' (to the apprentice) first- and second-year rates were major hurdles, conditions eased and satisfaction improved in the subsequent years as pay and overtime increased and the goal of completion loomed closer.

Some adult apprentices had distinct career aspirations, going well beyond conventional expectations of improved job security and earnings. The Gough and Gilmour apprentice was in this category. Adult apprentices with the MTA group scheme in Adelaide were pursuing apprenticeship for the qualification and for interest in the work, but also in expectation of future managerial roles or self-employment. Other companies could point to former apprentices and adult apprentices who had progressed through to management roles.

Generally, adult apprentices interviewed found that their companies and their training providers offered supportive employment and training environments. Two adult apprentices with Wesfarmers CSBP, who did three years (while in employment) of off-the-job training followed by a concluding year in a formal apprenticeship, were satisfied with TAFE but disheartened by the length of the qualification process.

# Summary

In this chapter, employer case studies relating to adult apprenticeships in the 'traditional' trades are described in summary form. The training perspectives of the companies, and of their training providers and adult apprentices, are documented. The case studies concentrate on 'flagship' companies known to employ adult apprentices.

The 16 firms participating represent a total of about 1800 apprentices, including about 125 apprentices aged over 25. Very few female or adult female apprentices are in evidence.

About half of the firms surveyed still use TAFE to provide some or all of their off-the-job training. Of the six largest (500-plus employees) firms, two use TAFE and three have outsourced apprentice training to group schemes. One conducts its own basic training and links with a 'dual sector' university for advanced training. Three of the five smaller firms use TAFE while the group schemes tend to maintain their own skills centres.

Recruitment and selection innovations are increasing opportunities for prospective adult entrants. Two of the big companies still draw primarily on male school leavers. Others, while accepting existing adult employees as apprentices, have outsourced the bulk of recruitment to their group

schemes, which take in VET-in-Schools or pre-vocational graduates and also adult workers. Some smaller companies and group schemes rely on regular school-leaver intakes, while others apprentice existing employees, or depend on approaches from potential apprentices or employers.

A significant trend is the outsourcing of training to group schemes. Some companies use ITABs or other external agencies for selecting or aptitude-testing recruits. Others mention new apprenticeships centres or employer incentives, drawing attention to rules that may indirectly discourage the recruitment of adult apprentices. One large company urges improvements in State Government documentation for adult apprenticeships, while another urges wide-ranging improvements in government support for post-trade training.

Adult apprentice wages tend to be too 'high' for employers relative to junior apprentice wages, but too 'low' relative to adult wages for the apprentices themselves, who will usually have greater family and financial responsibilities than their junior colleagues.

Despite the positive impacts that it could have on training costs, company skill formation and skill shortages, acceleration of adult apprentices through the applicable wage and competency levels appears to be relatively uncommon. Past practice and limited take-up of training packages may be inhibiting factors.

Some companies are prepared to maintain adult apprentices on their previous company wage, while others will offer them extra overtime to compensate for reduced wages. While 'high–low' adult apprentice wages are not an insurmountable barrier to adult apprenticeships, enterprising bargaining agreements or awards could be framed or modified more creatively to promote more adult apprenticeships with faster skill outcomes.

Although newer recruitment pathways are more inclusive of adults, once recruited the adult apprentices in the case studies usually follow fairly traditional pathways through the applicable training package for a four-year period. Adults are more likely to complete individual blocks of training, rather than the entire apprenticeship, early. Some companies encourage adult apprentices by developing post-trade and multi-skilling pathways for them, including 'dual-ticketing' adults to qualify in two different trades.

Adult apprentices receive an overall vote of confidence from the employers as being mature, dependable, safety-conscious and committed to training. Having greater maturity, adults may do well with customer contact work in retail-oriented trades, such as the auto trades. Most companies report very high completion rates for their adult apprentices. The positives outweigh the negatives, which may include the 'high' wage factor, fixed modes of working, time out of formal education, and unfamiliarity with computing or other newer technologies.

Despite the positives, employers do not expect much increase in the adults' share of their apprenticeships over the next two to three years. Several of the employers would be willing to take higher numbers of adult apprentices, but expect that there will be an insufficient pool of suitable candidates among existing employees or from outside the company.

Training providers generally welcome adult apprentices, for reasons similar to those of employers, but rarely pursue a significant variation in the learning program or a reduction in term. Training providers encourage self-paced learning among the adults and emphasise their cohesive effect on the class and its discussions, to the benefit of younger apprentices less keen to learn or less appreciative of the career opportunity.

Some providers press for extra government support (extra placement assistance, income support or employer incentive payments) as a means of encouraging adult apprenticeship.

While some adult apprentices are classic 'adult improvers' glad to take a second chance to qualify, a number interviewed were in the nature of 'high fliers' with a university background, with an existing trade qualification, or with management or business aspirations. Career aspirations,

broadening of skills, job and income security, and company loyalties, are the most commonly cited motives for undertaking an adult apprenticeship. Interviewees praise the supportiveness of employers and training providers, while expressing reservations about less palatable aspects such as low wages or lengthy training periods.

A number of themes arise from the complementary views of employers, providers and apprentices about the management of adult apprenticeships:

- ✧ a slight shift away from TAFE, but generally positive views of its adult training capacities
- ✧ notable innovation in recruitment and selection, to the advantage of adult apprentices
- ✧ the 'high–low' nature of adult apprentice wages, and possible avenues to address this
- ✧ conventional pathways observed for many adult apprentices, the limited wage and competency progressions perhaps limiting solutions to training costs and skill shortages
- ✧ evidence of a more ambitious approach to post-trade and multi-skilling pathways, such as to address the needs of 'high flier' adult apprentices as well as 'adult improvers'
- ✧ cogent, generally favourable, employer and provider views of adult apprentices, and high completion rates, without much expectation that their numbers in training will rise
- ✧ generally modest, but a few far-reaching, suggestions for greater or different government support of adult apprenticeships
- ✧ the positive impact of adults on juniors for trade teaching quality and outcomes
- ✧ the different types of adults doing apprenticeships, their diverse career paths and diverse capacities to address skill gaps and skill shortages

# Conclusions

This chapter combines the background statistics and research with the case studies, to develop concluding themes and strategies.

## Background to the report

Stimuli for this report were the demographic changes taking place in the Australian population and in the labour market. The population and labour force are ageing. New apprenticeship, especially traineeship, intakes have aged. Youth intakes may not be sufficient in the future to meet the needs of industries facing skill shortages. It is expected that adults will become increasingly important as a source of entry-level skills for companies.

The report examines the statistical and research evidence about adult apprentices in traditional trades, in order to develop hypotheses about firms' training practices and innovations for adult apprentices. An additional aim is to develop ideas and recommendations to encourage more firms to train more adult apprentices.

Through the medium of employer case studies, conducted in 2001 with the assistance of State training agencies and industry and training bodies, the report probes company approaches to encouraging and accommodating adult apprentices in the traditional trades (especially mechanical, auto, electrical–electronic and construction).

The report examines the appropriateness of the traditional apprentice model for training adults (over 25 years of age), and studies how firms are adapting training practices and workplaces to meet their needs. It seeks out training innovations and ideas that may assist in developing more effective training for adults to help resolve ongoing skill shortages.

## Research and case studies reviewed

This section draws together and compares key findings from the training statistics and research, and from the employer case studies that were conducted.

- ✧ The important statistical shift in Australia's training system is the growth in traineeships since 1995. Traineeships have expanded around, rather than at the expense of, the trades, which are holding their own in terms of training and workforce numbers.
- ✧ While the over-25s share of training in 'traditional' trades has crept up from 8% to 12% over 1995–2000, women and adult women still hold much smaller shares of the training.
- ✧ Studies point to the net cost to employers of trade training, especially in the 'traditional' trades. Such studies, however, query the value of shifting more of the cost to apprentices. Adult apprentice wage rates may appear 'high' to the employer if not the apprentice, but extra employer training incentives are not available to offset this.
- ✧ Recent reports demonstrate cautious experimentation with 'alternative pathways' in the traditional trades. More adult-friendly policy and program initiatives could unblock trade skill

pathways and skill shortages. Non-apprenticeship pathways to skills can also help to address trade skill shortages.

- ✧ A major 2001 survey on wastage from the trades points to high adult apprentice completion rates. However, replenishment through formal apprenticeship remains low in the traditional trades—about 2% workforce replenishment annually compared to 4% or more 15 years ago.
- ✧ Sixteen firms employing adult apprentices in 'traditional' trades contributed case studies to this report. The sample was reasonably representative of the overall distribution of 'traditional' trade employment. About 7% of the 1800 apprentices represented were aged over 25, but few female apprentices were in evidence.
- ✧ About half of the 16 firms still use TAFE for some or all off-the-job training. With the availability of 'user choice' after 1998, most of the rest have redirected off-the-job training to group schemes or to their own skill centres. New recruitment and selection pathways opening up among the firms, including outsourcing of recruitment and the admission of existing adult employees to apprenticeship, may increase adult apprentice opportunities.
- ✧ While research picks up the 'high' cost to employers of adult apprentice wages, it tends to play down their 'low' value relative to adult wages generally. Considering the potential benefits, acceleration of adult apprentices through wage and competency levels is restricted. The low market penetration of the relevant training packages may be a factor.
- ✧ In line with recent research, the case studies suggest the 'high–low' adult wage problem gets limited attention through industrial relations and enterprise bargaining, although a number of employers make individualised adjustments by keeping adult apprentices on at their existing company wages or giving them extra overtime.
- ✧ To the mutual advantage of employers and apprentices, the latter may finish individual blocks of training early, or 'sign off' their indentures early. Importantly, a number of employers are looking to give adults enhanced post-trade skill and career outcomes, including 'dual ticketing' and assistance with further study.
- ✧ In the case studies, employers and training providers value adult apprentices for maturity, dependability and (mirroring recent research) high completion rates. The positives outweigh the negatives, such as 'high' adult apprentice wages and perceived educational or workplace inflexibilities. Despite the positives, employers do not expect that adult apprentice numbers will rise in trades. Pools of suitable internal or external recruits are depleted all too quickly.
- ✧ Some employers urge extra placement assistance, income support or employer incentive payments for adult apprentices, or better documentation of procedures and pathways. One employer calls for broader government support for post-trade training and training infrastructure. Training providers endorse adults' self-paced learning capacities and their positive contributions to class cohesion, discussion and outcomes, including role modelling for younger apprentices.
- ✧ Adult apprentices interviewed emphasise their diverse backgrounds and contributions to company skill needs, from 'adult improvers' to the 'high flier' with management aspirations. While praising employer and provider support, a fair proportion of the adult apprentices are less enthusiastic about low wages and lengthy training requirements.

# Themes and strategies

Building on the case studies, this concluding section develops themes and suggested strategies for getting adults into the trades. The themes are:

- ✧ reviewing adult apprenticeship trends and policy
- ✧ managing adult apprentice costs and wages
- ✧ broadening adult trade and skill pathways
- ✧ training adult apprentices for skill gaps and shortages
- ✧ adult apprentices contributing to cohorts' training outcomes

## Reviewing adult apprenticeship trends and policy

This theme originates as a result of first examining adult apprenticeship trends, and secondly examining the general treatment of adult training issues in VET policy and measurement.

'New apprenticeships' are more inclusive of adults and women than are trades and traditional trades. Adults over 25 have made some gains in traditional trades in the past five years (12% of training, up from 8%), but females and adult women have made virtually none.

To the extent that the case studies are representative, they exhibit similar trends. On average, the 16 firms employ only modest proportions (about 7% aged 25 and over) of adult apprentices, although two of the manufacturing firms actually rely primarily on adult apprentices. Female apprentices are scarcely in evidence, numbering about a dozen, or less than 1% of the total number of apprentices embraced by the case studies.

For cogent reasons, employers and training providers hold adult apprentices in high esteem. But there is little optimism that their numbers will rise. Employers appear to have exhausted the pool of suitable existing adult employees or do not expect that, other things being equal, existing labour market and adult apprentice wage conditions will lead to higher numbers of suitable external applicants.

Current national VET policies and performance measurement priorities, while recognising re-skilling needs in the ageing workforce, give limited attention to adult training and adult apprenticeship issues. Since 1995, the adult and adult female gains in training are very much in traineeships rather than trades. Looking forward over the next five years, a case can be made for more gains in trades. This relates to the general ageing of the workforce and the need for more adult training, the evidence that adults are only making slow gains in trades under current policies, and the particular contributions that adult apprentices can make to the demand (skill gaps and shortages) and supply (training quality and outcomes) sides.

In reviewing adult apprenticeship trends and policy, the following actions may prove useful:

- ✧ that there be more open and intensive reporting of trends in adult and adult female apprenticeships in the trades and traditional trades, and their post-trade equivalents
- ✧ that VET performance reporting gives a more definite account of outcomes and priorities for adult training, especially for adults in trades
- ✧ that consideration be given to indicative targets for adult (for example, over-25s to have 20% of all training by 2005) and adult female (for example, over-25 women to have 10% of all training among over-25s by 2005) shares of training in the traditional trades

## Managing adult apprentice costs and wages

This theme originates from the analysis in the case studies that the 'high–low' adult apprentice wage phenomenon is a, or the, main obstacle to increasing their numbers.

The research evidence is that trade training is a net cost borne by the employer for social and community motives, or in expectation of a pay-off from retaining apprentices after training. Costs are higher in the traditional trades, and higher in the first year than later years.

The case-study evidence is that, for employers, 'high' adult apprentice wages compared with junior rates are the main impediment to employing more adults, rather than any perceived learning or workplace inflexibilities that adults may have by comparison with juniors. But, from the adult apprentice's point of view, the apprentice wage is 'low' compared to adult wages generally, or low compared to their accustomed adult wages. With the extra family and financial responsibilities that go with age, the first year or two of indenture can be disheartening.

The research and case studies suggest that specific accommodation for adult training needs is fairly uncommon in enterprise bargaining agreements. Extra overtime, and keeping adults on at

their previous company rates, are common local adjustments for adult apprentices. Some awards specify adult rates, but these may both advantage and disadvantage apprentices. New award variations, such as those requiring permanent engagement of casual employees, can inadvertently disadvantage adult apprentices.

The practice of keeping existing employees on at their previous wage as adult apprentices is common sense, equitable and to be encouraged. In some cases, it might make sense to extend a similar privilege to adult apprentices who are new employees. Another option is to post adult apprentices with relevant experience straight on to a second- or third-year wage rate. Extra overtime is also used, but can be a mixed blessing, as it has the capacity to work against broad-banding of skills or training quality generally.

Some employers and some adult apprentices may legitimately continue to prefer the full four-year term. As the use of relevant training packages increases, shorter indentures (given due quality assurance) would be one sensible means of compensating other adult apprentices possessing relevant skills and work experience but having to accept a lower wage. Quality skill outcomes surely could be achieved in two to three years in some cases. Another compensation would be to use the training package materials to offer adult apprentices enhanced work projects and skills that build on their previous experience.

Some employers urge a different approach to employer incentives to help defray the costs of adult apprentices. Current DEST employer incentives are nominally age-neutral, but they do not apply to any person already possessing a certificate III qualification, as becomes much more likely with increasing age (see DETYA 2000, 2001).

A higher sign-on bounty could be attached to each adult apprentice, but the history of such bounties is mixed. Another measure, linked to actual skill formation, might be to offer employers enhanced progression or completion payments for adults, or for faster progression by adults. Enhanced adult-related payments could also be attached to group schemes, which are doing good work with adults but which do not receive any completion payments at present.

In managing adult apprentice costs and wages, the following actions may prove useful:

- ✧ that the practice of keeping adult apprentices at existing company wages, or at equivalent company wages, be encouraged
- ✧ that relevant metal, electrical, auto and construction awards be re-examined for the presence of fair and equitable variations to accommodate adult apprentices
- ✧ that, with due quality assurance, more widespread use be made of shorter indentures or enhanced skilling to compensate adult apprentices with relevant prior experience for their periods on 'low' wages
- ✧ that there be an investigation of enhanced employer incentive payments (perhaps linked to progression, rather than per capita) attaching to the engagement of adult apprentices

## Broadening adult trade and skill pathways

This theme is concerned with the evidence in the research and the case studies of progress with, but constraints to, adult apprentice pathways.

The research describes cautious experimentation with 'alternative pathways' in the trades, although Webster et al. (2001) argue that these new pathways are still insufficiently responsive to adult training and up-skilling needs. That is not to deny the importance of non-apprenticeship VET pathways to skills, and their capacity to reduce skill shortages, as confirmed by recent studies of electrotechnology and construction trades. However, it is often the case in core metal and electrical trades that non-trade pathways do not lead to entry to actual trades jobs.

In the case studies, broader approaches to training are evident in terms of the diversification of training providers and in diversified recruitment and selection processes that are more inclusive

of adults. Existing adult employees, or adult pre-vocational graduates, make sense as prospective apprentices, as they have demonstrated a commitment to the firm or trade.

Once adult recruits join the firms, they tend to travel along fairly traditional apprenticeship pathways. As noted above, practical and helpful adjustments to standard wages and overtime are often made in favour of adults. Older apprentices can finish blocks of training early, and occasionally 'sign off' their entire indentures a little early. Early sign-off finds favour with providers and apprentices, perhaps more so than with employers. Some employers believe it may become more common as training packages and their pathways mature.

Cully and Curtain (2001) propose that older apprentices in the trades be vetted or 'skill-audited' before they commence. In the case studies, one employer would have preferred clearer documentation of pathways and procedures for adult apprentices, to ensure correct starting points and smooth progression of training. While current trade-related training packages provide great detail, this may be technical detail about the units and combinations of units, rather than basic information about the pathways and progressions that might suit particular types of employer or apprentice.

Innovative employers and training providers are looking to give adult apprentices enhanced skills and careers during the apprenticeship (extra skills and achievements, dual ticketing) or after (pathways to post-trade skills, teaching and management). The training packages, to the extent that they have been adopted in the 'traditional' trades, may make it easier and quicker for adults to achieve these dual tickets or post-trade qualifications.

One firm made broad proposals for better government support for post-trade training, and for company training infrastructure, equipment and expertise. This is analogous to the NCVER (2001b) proposal for increasing the relative share of apprenticeship training going into the paraprofessional and technician occupations.

To some extent, post-trade training for adults appears to fall between two stools. It would not normally be supported, by employer incentives (for employers), or by AUSTUDY (for students). Employer incentives, for example, are available for some apprentices upgrading from certificate II to III or IV, but not for access to post-trade qualifications as such. While students may have to be over 25 to attract AUSTUDY support for (post-trade or any) diplomas (Centrelink 2001), they usually have to be studying full time, which is out of line with the career and family tracks of the kinds of adult apprentices being examined here.

A similar institutional 'demarcation' issue arises with some post-trade diploma, or even degree, pathways. Such pathways may be delineated in training packages, nominally the province of VET, but historically the qualifications are more the province of higher education. This demarcation issue may be easier to address in the dual sector institutions.

In broadening adult trade and skill pathways, the following actions may prove useful:

- ✧ that industry bodies, new apprenticeships centres, training packages and training providers, develop and document 'model' pathways, progressions and procedures for adults in 'traditional' apprenticeships and studying post-trade
- ✧ that continuing efforts be made to facilitate pre-vocational pathways and non-trade skill pathways for adults trying to enter occupations in, and related to, the 'traditional' trades
- ✧ that the Commonwealth and States consider introducing 'demonstration' projects offering training infrastructure and post-trade training support to enterprises contracting to boost adult and adult female training in trades and post-trades
- ✧ that the Commonwealth consider the costs and benefits of extending adult employer or adult study benefits to economically valuable post-trade and related occupations

## Training adult apprentices for skill gaps and shortages

This theme considers shortages in the 'traditional' trades, which might be remedied over time if more adults were available to augment the supply pools.

Statistics and labour market research over the past 15–20 years point to persistently low rates of supply and recurrent shortages in the 'traditional' trades. With annual rates of replenishment through formal apprenticeship falling away to about 2%, it is not surprising that shortages might persist or that non-trade pathways to skills might increase.

Recent Commonwealth and State studies give varying estimates of apprenticeship completion rates. Adult (over 25) apprenticeship rates remain fairly low, at about 12% of total numbers in training for 'traditional' trades. Recent research (Harris et al. 2001; Cully & Curtain 2001) points to the personal, labour market and training factors associated with training completion and to high adult apprentice completion or re-engagement rates. In the present case studies, the factors associated with high adult apprentice completion appear to relate to careful initial selection and to the apprentices' maturity and commitment.

Increasing the share of 'traditional' apprenticeships flowing to adults may improve VET system performance in terms of higher overall completion rates and reduced shortages.

A truism of labour market research is that relative shortages of skilled labour in some areas of the trades can co-exist with relative labour market balance or oversupply in others. The ANTA (2000a) report on alternative pathways is an indication that adult apprentices have a role to play in addressing these types of shortages. The report indicates that new pathways can be triggered by skill shortages and particular high-skill needs and, correspondingly, that they open up training pathways to new groups on the supply side (for example, adults).

Similarly, the case studies suggest that complementary types of adult apprentices are helping to fill different types of skill niches and skill requirements in the trades. The classical 'adult improver' may raise company quality, skill and productivity by upgrading within the smaller firm. Other kinds of high-achieving adult apprentices could (if offered fair and reasonable pathways) diversify the supply of post-trade and management skills in larger firms, also boosting the supply of industry experts and teachers for the trades.

Recent industry-sponsored studies of national skill shortages in the 'traditional' trades point to adult training issues among the skill solutions, including alternative and non-trade pathways to skills, recognition of prior learning, retraining of experienced workers, and post-trade up-skilling into supervision and management.

In training adult apprentices for skill gaps and shortages, the following actions may prove useful:

- ✧ that there be more research and promotion of factors associated with (high) adult apprenticeship completion in the 'traditional' trades
- ✧ that government and industry groups encourage employers to look to adult apprentices, especially existing employees, as a supply source for niches in the trades and post-trades
- ✧ that model trade and skill pathways for adults in 'traditional' trades continue to respond to directions and findings in national industry studies of skill gaps and shortages

### *Adult apprentices contributing to cohorts' training outcomes*

The case studies demonstrate that adult apprentices can make particular contributions to the cohesion and quality of on- and off-the-job training in the group.

High completion rates are an indirect form of evidence that, despite the wage reductions or other hardships that may apply, adult apprentices are surviving the apprenticeship and making a

positive contribution to training outcomes. Little research has been conducted on the in-training experiences of these apprentices relative to their juniors.

In these case studies, employers and training providers have a consistent view of the training contribution that adults can make. Employers value them for their high completion rates.

On the job, they are seen as mature, committed, dependable and safety-conscious, and these advantages tend to outweigh age-related working and learning inflexibilities that may exist. Older apprentices can mentor juniors, and they may be better placed than employers or teachers to convince younger apprentices of the value of the training opportunity.

Training providers endorse the value of older apprentices in the skill centre and classroom situation. They lift group cohesion, discussion and outcomes. Some training providers consciously aim to provide adult-friendly learning environments, to provide special training to overcome adult literacy or skill deficits, or to improve class dynamics by pairing adult apprentices with one another or with younger 'problem' students.

For adult apprentices to contribute to cohort training outcomes, the following actions may prove useful:

- ✧ that the effects of adults on training quality and completion in 'traditional' trade apprentice groups be studied in more detail
- ✧ that industry groups and training package materials encourage adult appprentice employers and training providers to provide adult-friendly training and to make use of adults' beneficial peer and classroom influences

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# Appendix: Questions used in the case studies[1]

## Questions directed to the company's apprenticeship manager

Q1. What is your company's total employment, and employment of tradespersons and apprentices in the electrical[2] trades? Can you divide the tradespersons and apprentices into numbers in individual electrical trades?[3]

Q2. How many of the apprentices (at Q1) are over 25 (at time of survey)? Tell us about 21–25s too if there are a number of them.

Q3. Do you expect the total number of apprentices (at Q1) to go up, go down, or remain steady, over the next 2–3 years? How about over-25s? What factors influence your answer?

Q4. Can you estimate what percentage of your apprentices would usually complete their training satisfactorily? Is it any different for the over-25s?

Q5. Can you comment on the main reasons that might cause your apprentices, and your adult apprentices, to complete or not to complete training?

Q6. Who (if not you) provides off-the-job training and can you give us contact details (phone, e-mail) of a senior course co-ordinator or similar? (NCVER would ask them Q11, as below)

Q7. We will send you back a two-page draft, developed from what you send us, but do you have any particular preferences as to how your material should be glossed for any public report?

Q8. We'd like to get a thumbnail sketch of how you like to train your electrical apprentices. These are some issues it might be useful to probe:

## Recruitment practices?

*Use of government incentives and support (including ITABs, new apprenticeships centres, employer incentives, group training companies)?*

*Organisation and workplace practices, or industrial relations practices?*

*Training delivery arrangements (RTOs, teaching, release patterns, module arrangements, etc.)?*

*Training pathways (typical trade path, accelerated trade, upfront traineeship, RPL, VET-in-Schools, etc?)*

*Any differences with over-25s?*

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1 Slightly different versions of the questions were used from time to time, and from employer to employer. Some employers were interviewed face-to-face, in other cases telephone interviews or e-mail responses were used

2 Q1 refers here to electrical trades. Evidently, Q1, and so on, were modified according to the particular trade group or groups likely to be encountered

3 Q1 is not strictly applicable to group training schemes, and was modified appropriately in practice

Q9. For your company, what are the main pluses and minuses of having over-25 apprentices, What are the blockages to having them, and what would bring in more of them?

## Questions for (1–2 of) the company's adult (over-25) apprentices

Q 10. Essentially, we'd like to know a bit about previous education and employment, motivations for now doing adult training (with your company), extent to which their training does or does not accommodate over-25s, likes and dislikes in the apprenticeship, intentions for and on completion.

## Questions for the company training provider (RTO)

Q 11. Essentially, we would inquire about the RTO views on prospects for over-25s in trades generally, how they train the over-25s for the company, what training innovations they are practising (or see a need for) with over-25s, and how they monitor and evaluate training.


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