RESEARCH REPORT

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Adult trade apprentices: exploring the significance of recognition of prior learning and skill sets for earlier completion

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National Centre for
Vocational Education Research

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Department of Education and Training

INFORMING POLICY AND PRACTICE
IN AUSTRALIA'S TRAINING SYSTEM

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About the research

Adult trade apprentices: exploring the significance of recognition of prior learning and skill sets for earlier completion

Jo Hargreaves and Davinia Blomberg, NCVER

The nature of apprenticeships is changing. Increasing proportions of adult apprentices are prompting demand for various alternative pathways to completion. One option for an alternative pathway to accelerate completion is the use of recognition of prior learning (RPL) to identify existing skills and knowledge in combination with gap training. In this study we investigate the extent to which recognition is occurring for adult trade apprentices. The impacts of earlier completion are explored, as is the pay-off to completion in terms of employment outcomes and wages for an adult trade apprentice by comparison with trade apprentices under the age of 25 years.

Key messages

- There are significantly more individuals aged 25 years and over commencing a trade apprenticeship today (40.1% in 2013) compared with ten years ago (14.9% in 2004).
- There are growing numbers of individuals across all ages completing their trade apprenticeship in a shorter timeframe. This is especially noticeable for adult apprentices, with well over half completing within two years via a range of options such as early sign-off, competency-based progression or recognition of prior learning and gap training.
- An RPL-granted subject outcome for trade apprentices 25 years and older has increased from a low base (3.5% in 2009 to 7% in 2013); however, these levels for trade apprentices are markedly lower than peer-age students who either have no training contract or who have a traineeship. The subject enrolments with RPL-granted outcomes for this group are far higher, at 78% in 2013.
- The data confirm that a large number of adults commence an apprenticeship with no formal prior education but with knowledge and skills gained through existing workforce participation; yet RPL is still not being offered by all publicly funded registered training providers.
- Shortened pathways are not adversely affecting outcomes for the individual adult trade apprentice:
  - One in five who completes their qualification reports having at least one subject where RPL was granted. This compares with only one in ten for those aged 24 years and below.
  - Adults using RPL end up with slightly higher average annual wages.
  - Prior experience itself, even without RPL to shorten training, has a positive impact on wages and being employed at a higher skill level.

Dr Craig Fowler
Managing Director, NCVER

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Employment and wage outcomes for adult apprentices on a shortened pathway are comparable overall with other adult apprentices.

Executive summary

A unique feature of the Australian training system is its flexibility, a consequence of the introduction of a competency-based approach and various policies encouraging the participation of adult learners, including, for example, the practice of recognition of prior learning (RPL). Australia also has a well-established apprenticeship training model, which for some time now has been available to individuals of all ages.

The extent to which employers and adult apprentices are using and benefiting from the flexibilities inherent in the training system is explored in this study. The aim is to examine the role of RPL and skill set (gap) training for adult apprentices in facilitating advanced entry into their trade and therefore their earlier completion. This is a concept which challenges the underlying assumption of the traditional time-served apprenticeship model, in terms of whether the benefits are equally preserved for the employer and the employee. The impacts of earlier completion are considered, as is the employment and wage pay-off from accelerated completion.

Data collected by the National Centre for Vocational Education Research (NCVER) confirm that the average age profile of apprentices is changing and that the numbers of adults over the age of 25 years commencing a trade are increasing. In particular, more existing workers with skills but no prior education are commencing a trade. Despite, at least up until 2013, the influence of apprenticeship incentives on growth in this area, this study attests to the importance of the apprenticeship system to adults with no prior educational history. The opportunity to access RPL, which recognises prior experience as part of their off-the-job training, is critical for this cohort of learners.

While there is evidence of increased rates of recognition for trade apprentices, and increases in RPL use amongst qualification completions in the older age groups, the numbers are still considered low for trade apprentices when compared with other apprentices and students overall. In addition, RPL is still not being offered by all publicly funded registered training providers. The ad hoc nature of the funding, support and practices associated with RPL and early completion options may also be creating barriers for both employers and individuals attempting to navigate the system.

There has been widespread support for a variety of models that facilitate earlier completion, such as early sign-off, competency-based progression or a combination of RPL and gap training. Unfortunately the data do not identify the option used or the reason behind the early completion. Nevertheless, the data do confirm that the numbers of apprenticeships of shorter duration are growing, especially for adult apprentices, with well over half completing within two years.

Employment and wage outcomes for adult apprentices on a shortened pathway are comparable overall with other adult apprentices. Recognition of prior learning may also play a role in occupational mobility at the same skill level. These findings suggest however that prior experience itself may have a slightly greater impact on wages following training than the type of pathway undertaken.

A number of cultural and systemic issues remain tied to the traditional time-served apprenticeship model. The *idea* of rewarding competency rather than time-based participation is championed amongst some but is not being fully realised in *practice*.

Despite studies suggesting generally positive outcomes for employers with adult apprentices in relation to the return on their investment, there is arguably less incentive for employers to support an accelerated pathway, since the perception is that the primary benefits lie with the individual.

Overall, this study suggests that shortened pathways are not adversely affecting the outcomes of the individual trade apprentices. Cultural attitudes to alternative pathways to completion during an apprenticeship and inconsistent treatment and funding of RPL, as well as a lack of understanding about the role and purpose of skill sets, may be having an impact on the full benefits arising from these flexibilities for both employers and individuals.

It has only been in the last decade that structural changes to the traditional apprenticeship model have opened up their availability to people of all ages.

Introduction

The idea that apprenticeships should be available to adults as well as young people was first proposed in a report from 1959, *Training for industry* (Ray 2001). And the concept of 'fast-tracking' in apprenticeships dates back to well before current notions of 'acceleration' in a competency-based system. Indeed the Commonwealth Reconstruction and Training Scheme, introduced around the time of the Second World War, demonstrated that adult service men and women returning from war 'could be trained in less time than juniors' (Ray 2001).

Apprenticeships have a strong historical presence in Australia, and it is important to consider this from the outset in terms of what an apprenticeship is designed to achieve. In contemporary Australia an apprenticeship is defined by:

- the existence of a regulated, employment-based training arrangement and a registered legal training agreement (originally called an 'indenture', and more recently a 'contract of training')
- a commitment by the employer, the apprentice or trainee, and a registered training organisation (RTO) to an agreed training program in a specified occupation, all of which are set out in the training agreement
- an occupational training program, which consists of a concurrent combination of paid employment and on-the-job training, and formal (usually off-the-job) training that leads to a recognised qualification
- training that is provided at an agreed level in the Australian Qualifications Framework (AQF) and to standards set down in the Australian Quality Training Framework (AQTF) (Knight 2012).

While the characteristics of apprentices — and occupations and industries — may change over time, there are some aspects that have not changed:

> An apprenticeship has always involved a form of indentured labour and the learning of a craft, skill or ability to carry out a specified job. Originally, the model applied exclusively to trade and craft occupations, which in current terms are mostly at certificate III level in the AQF, with some at certificate IV level. (Knight 2012, p.7)

> An important underlying assumption of the apprenticeship model is that there are benefits to both parties — employer and employee. For the employee there is the guarantee of employment for a period of time, as well as the acquisition of skills and the development of a long-term occupation. For the employer there is the benefit of low-cost labour and the capacity for training an apprentice to suit their business requirements. There is also the possibility that apprentices, if they have a progressive outlook, are better placed to acquire new skills or use new production techniques as economies change. (Knight 2012, p.9)

It has only been in the last decade that structural changes to the traditional apprenticeship model have opened up their availability to people of all ages. Other important changes have included broadening institutional settings, increasing the provision and value of incentive payments to employers and apprentices, and expanding availability to existing workers as well as new entrants to an industry (Knight 2012). The introduction of competency-based

training and the incorporation of apprenticeship qualifications into the AQF also opened up opportunities for non-traditional apprenticeship pathways.

The aim of this project is to examine the extent and outcomes of recognition of prior learning and skill set (gap) training for adult trade apprentices in facilitating advanced entry and therefore earlier completion into their trade, a concept which challenges the underlying assumption of the apprenticeship model, in terms of whether the benefits are equally preserved for employer and employee.

Research purpose and questions

This study considers the extent of recognition of prior learning and use of skill set training amongst adult trade apprentices. The impacts of earlier completion into a trade are considered. The employment and wage pay-off to accelerated completion are also explored.

The overarching research questions are:

- How much RPL activity relates to older trade apprentices?
- How do adults entering a trade via a shortened pathway (using RPL and skill set training) compare with other completing apprentices (traditional pathway, school leavers, under 25 years) in terms of:
  - employment outcomes
  - income.

Research method

In this study we undertake a review of the literature (see appendix A for search strategy applied) and a statistical analysis of data from a number of NCVER sources: the National Apprentice and Trainee Collection; the National VET Provider Collection; and the Student Outcomes Survey (SOS). We also conduct a case study of the National Apprenticeships Program to provide a specific example of RPL and skill set training in practice.

Definitions

In this study we follow the approach used by NCVER in its statistical publications to define trade apprentices as those covered by major group 3 (Technicians and trades workers) in the Australian and New Zealand Standard Classification of Occupations (ANZSCO). One of the limitations of using this group is that it may not capture all apprenticeships and that it may capture some workers who, despite being in this category, are not apprentices. Throughout the remainder of the report, the term ‘apprentices’ is used to refer to both trades apprentices and trainees. While the majority of literature sourced relates to trade apprenticeships, the scope of some is unavoidably the broader apprenticeship cohort, particularly in the section on estimating outcomes and benefits.

The data sourced from the National VET Provider Collection and the Student Outcomes Survey use the occupation assigned to the course to distinguish apprentices from trainees based on major group 3 (Technicians and trades workers) in ANZSCO. This occupational coding is based on the type of occupation that may be expected from the course. This can be problematic for generic courses, which may lead to multiple occupations, but is less problematic for more specific courses, such as the typical trade-related course.

The cohort for this study is those aged 25 years and over undertaking a trade apprenticeship. (This age group is also denoted as 'adult apprentices' or 'older apprentices' in this report.) Consistent with the approach of the Australian Bureau of Statistics (ABS), we use three age categories: less than 25 years; 25 to 44 years; and 45 years and over. We consider both the 25 to 44 years age group and the 45 years and over group, as well as comparing both groups with those under 25 years.

This report refers to an alternative or non-traditional apprenticeship pathway as one involving the recognition of prior learning and skill sets (gap training) for advanced entry into the apprenticeship, which then facilitates accelerated or earlier completion, potentially leading to a full qualification.

Caveat

Shortened pathways are identified using variables on RPL activity in the National VET Provider Collection and the Student Outcomes Survey. These data are supplemented by tables from the National Apprentice and Trainee Collection, which show an increasing trend towards the uptake of shortened pathways by means of the training duration data element. A methodology involving multiple data collections was undertaken because it is difficult to distinguish an accelerated approach that uses reductions allowed in nominal time to complete the apprenticeship from that based on RPL and skill set training (only the data on training duration held is in the National Apprentice and Trainee Collection).

National Apprenticeships Program case study

NCVER has analysed National Apprenticeships Program (NAP) data held by the group training organisation, East Coast Apprenticeships, to inform this study. The National Apprenticeships Program is a national initiative encouraging more adults into advanced entry into the trades. It involves a two-stage pathway — recognition of prior learning (the benchmark entry point is the individual having 40% of the required skills) and identified gap training.

The program began in 2011, with the last intake period for the pilot closing in April 2014. Almost 10 000 individuals applied for the NAP initiative and are on the database maintained by East Coast Apprenticeships. Over 1000 have completed the RPL component. Over 93% of the apprentices are aged 21 to 50 years. Data are available on applicants' background characteristics, the extent of RPL skills, qualification outcomes and employment outcomes. Queensland and Western Australia were the only jurisdictions to sign up apprentices. Recognition of prior learning was undertaken in South Australia and Tasmania, but no employers were engaged to take on apprentices from these two locations.

Where possible, the same questions and analyses used for the NCVER data are applied to the National Apprenticeships Program data, as well as identification of any other variables not possible from NCVER, such as the percentages of older apprentices who are former Australian Defence Force Personnel. Further information about the National Apprenticeships Program can be found in appendix B.

Structure of this report

We begin this report by considering a number of interesting trends emerging in the public VET system over the last decade and providing a profile of the adult apprentice; this is followed by contextual information on apprenticeship pathways and models of earlier

completion. The third section combines information from the literature with data on the significance of RPL and the extent of RPL activity relating to adult apprentices. This is followed by a section exploring the role of skill sets. We then examine the outcomes and benefits of shortened apprenticeships before examining the impact of incentives and wages in supporting adult apprentices. The final section gives a summary of the key issues identified and the implications for policy.

In 2013, the average age of a commencing apprentice had increased to 26 years for males and 27 years for females.

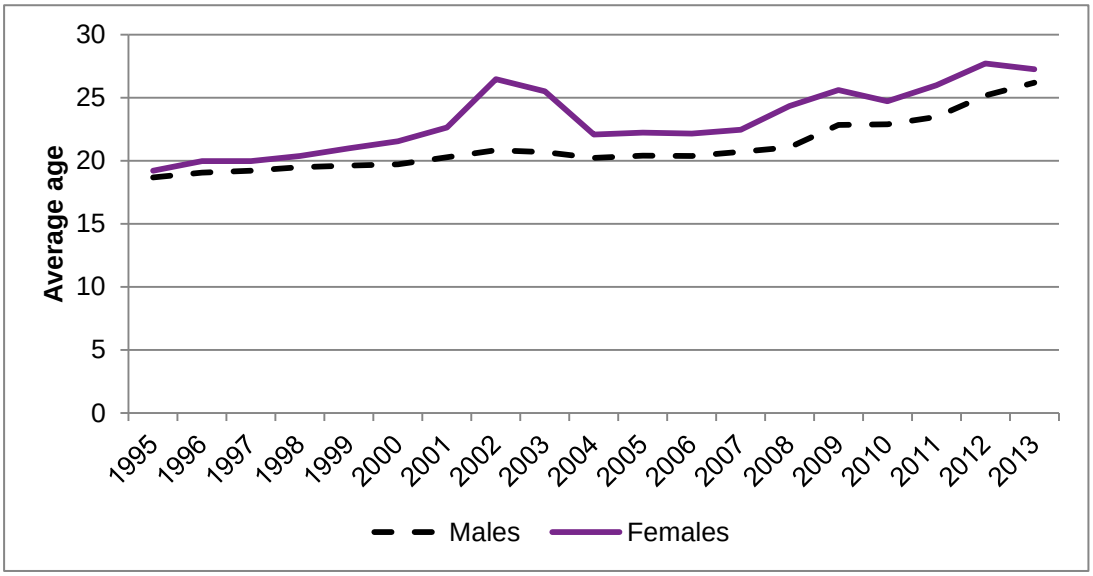
Recent trends and a profile of the adult apprentice

To begin, we examine several interesting trends that have emerged over the last decade and consider the various characteristics of an adult apprentice, noting our earlier clarification that the term 'apprentice' throughout the analysis refers to apprentices and trainees in trades occupations.

The average age profile of apprentices is changing

In 1995, the average age of a commencing male and female apprentice was 19 years. In 2013, the average age of a commencing apprentice had increased to 26 years for males and 27 years for females (see figure 1). Although the average age has increased significantly since 1995, the most common age of a male and female apprentice has not changed and is still around 18 years of age.

Figure 1 Average age of commencing apprentices[1] by sex, 12 months ending December 1995–2013

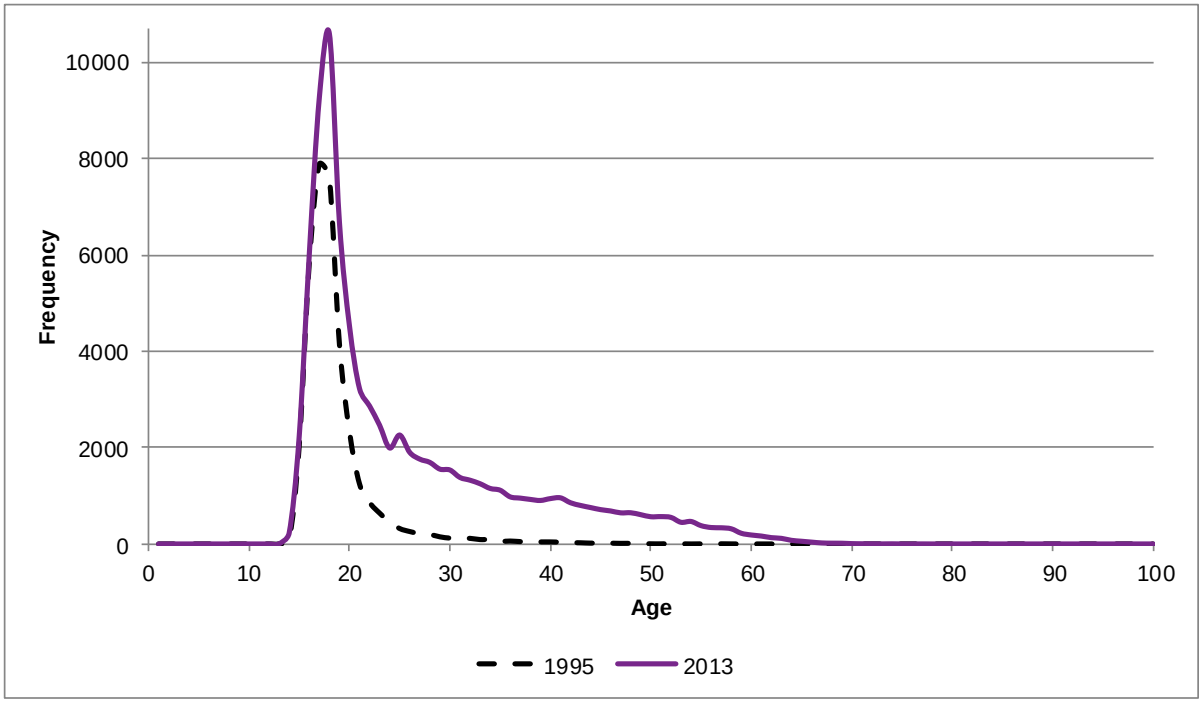


Note: 1 'Apprentices' refers to apprentices and trainees in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Furthermore, the median age has not changed as significantly as the average age over this time period. An analysis of the age distributions in 1995 and 2013 suggests that the significant increase in the average age is due to an increased number of older apprentices (see figures 2 and 3).

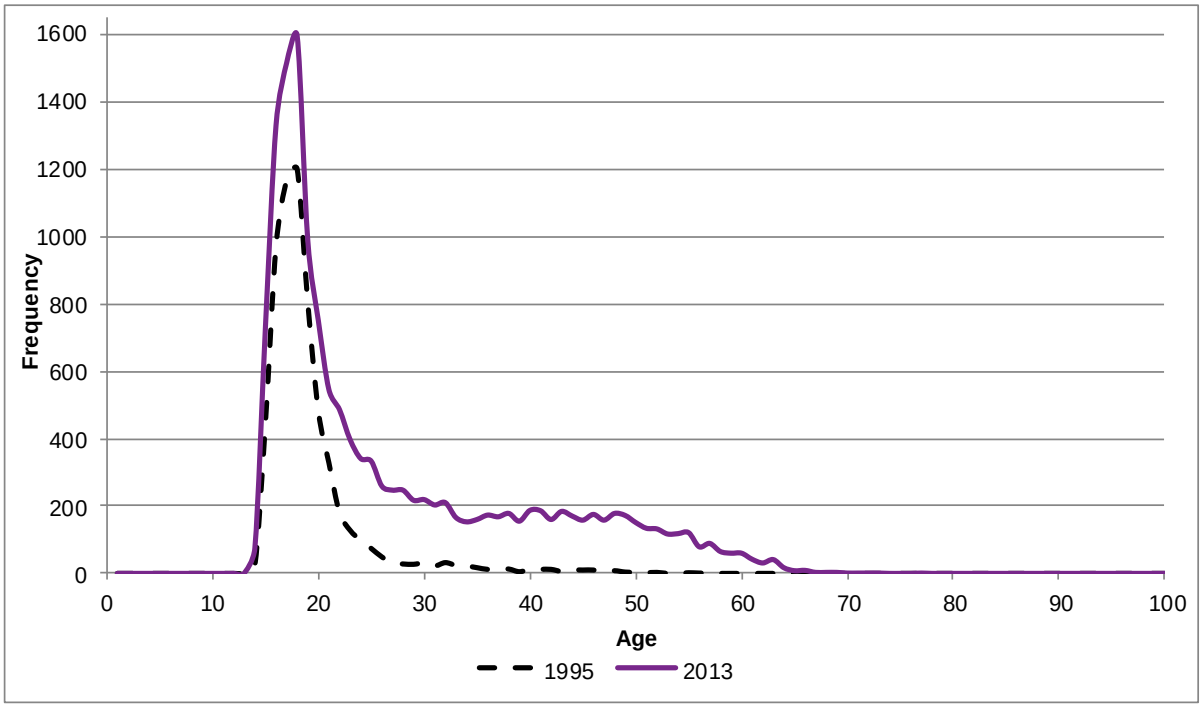
Figure 2 Distribution of male commencing apprentices[1] in 1995 and 2013 (12 months ending December)



Note: 1 'Apprentices' refers to apprentices and trainees in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Figure 3 Distribution of female commencing apprentices[1] in 1995 and 2013 (12 months ending December)



Note: 1 'Apprentices' refers to apprentices and trainees in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Adult trade commencements are increasing

There are significantly more people over the age of 25 years commencing a trade today compared with ten years ago (see table 1). In 2013, two out of five apprenticeship and traineeship commencements in the trades were by older age groups (25 years and over), compared with 14.9% in 2004.

Table 1 Apprentice[1] commencements by age group, 12 months ending December 2004–13

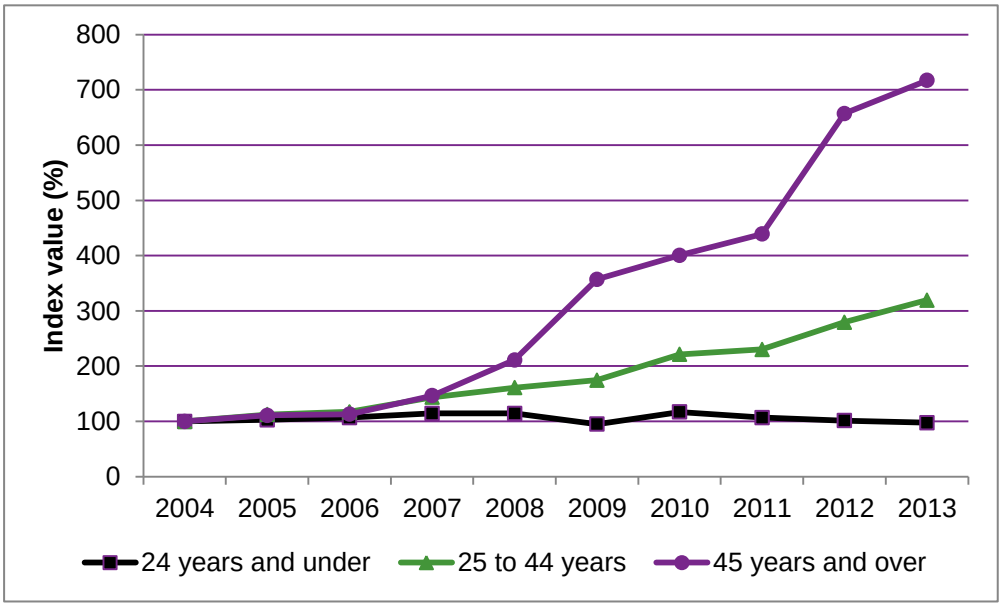
	24 years and under	25 to 44 years	45 years and over	Total	% trade apprentices and trainees aged 25 years and over
2004	60 247	9 077	1 459	**70 783**	14.9
2005	61 921	10 196	1 620	**73 737**	16.0
2006	64 353	10 652	1 648	**76 653**	16.0
2007	68 914	13 028	2 138	**84 080**	18.0
2008	68 873	14 619	3 082	**86 574**	20.4
2009	57 196	15 864	5 208	**78 268**	26.9
2010	70 462	20 095	5 846	**96 403**	26.9
2011	64 396	20 887	6 406	**91 689**	29.8
2012	61 121	25 356	9 588	**96 065**	36.4
2013	58 873	28 983	10 462	**98 319**	40.1

Note: 1 'Apprentice' refers to apprentices and trainees in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Figure 4 shows the growth in trades commencements over the past ten years using a common scale. Compared with 2004 levels, trades commencements have been at a similar level or declining for those aged 24 years and under. Compared with 2004 levels, trades commencements for those aged 25 years and over have been increasing.

Figure 4 Apprentice[1] commencements over 12 months by age group, 2004–13 (2004 = 100)[2]



Note: 1 'Apprentice' refers to apprentices and trainees in trades occupations under major group 3 (Technicians and trades workers).

2 The indices represent the changes in the number of apprentice commencements from the base year (2004) to other calendar years.

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Most of the growth in the older age groups has occurred in the last six years. Various structural policy changes and the introduction of incentives over the last decade have most likely contributed to this growth. For example, the Support for Mid-Career Apprentices initiative was introduced in July 2007 (Knight, Karmel & Guthrie 2011). In addition, changes in the economy during this time may have influenced whether individuals commenced a new trade, with movement into growth sectors during boom times or retreat from declining sectors during an economic downturn.

Changes in the economy during this time may have influenced whether individuals commenced a new trade, with movement into growth sectors during boom times or retreat from declining sectors during an economic downturn.

What are adult apprentices doing?

While young commencing apprentices continue to dominate more traditional trade areas, such as the construction trades, and certificate III level, a number of new trends have emerged in the training undertaken by older apprentices over the past two years. As shown in table 2, training activity for commencing older apprentices in 2013 was concentrated in:

- other technicians and trades workers,[1] and engineering, ICT and science technician occupations
- Sustainability; Integrated Telecommunications; and Resources and Infrastructure training packages (for more detailed commencement and completions tables see appendix C)
- certificate III qualifications; however, a large proportion of 2013 commencements was at certificate IV level for the older age groups (23.7% in the 25 to 44-year-old age group and 40.2% in the 45 years and over age group).

The growth in certificate IV commencements over 12 months for apprentices aged 25 years and over is shown in table 3. It should be noted this growth is mainly driven by the uptake of apprenticeships in the Sustainability Training Package — a relatively new training package covered under the technicians and trades workers occupational group.

[1] Examples of occupations in this group include hairdressers, gas or petroleum operators and print finishers. However, nearly three-quarters of apprentices aged 25 years and over working in the 'other technicians and trades workers' occupational group in 2013 comprised occupations that could not be further defined or elsewhere classified, even at the more detailed occupation (6-digit) level.

Table 2 Apprenticeship[1] commencements by training characteristics, 12 months ending December 2013

	24 years and under		25 to 44 years		45 years and over	
	Number	%	Number	%	Number	%
AQF qualification level						
Diploma or higher	85	0.1	173	0.6	46	0.4
Certificate IV	2 280	3.9	6 878	23.7	4 205	40.2
Certificate III	56 297	95.6	21 907	75.6	6 202	59.3
Certificate II[2]	212	0.4	25	0.1	9	0.1
Certificate I	0	0.0	0	0.0	0	0.0
Occupation (ANZSCO group)						
31 Engineering, ICT and science technicians	2 112	3.6	3 657	12.6	1 693	16.2
32 Automotive and engineering trades workers	13 981	23.7	3 872	13.4	751	7.2
33 Construction trades workers	15 156	25.7	2 229	7.7	195	1.9
34 Electrotechnology and telecommunications trades workers	9 153	15.5	6 435	22.2	1 445	13.8
35 Food trades workers	6 973	11.8	2 825	9.7	988	9.4
36 Skilled animal and horticultural workers	3 009	5.1	1 661	5.7	638	6.1
39 Other technicians and trades workers	8 489	14.4	8 304	28.7	4 752	45.4
Total	**58 873**	**100.0**	**28 983**	**100.0**	**10 462**	**100.0**

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

2 There is no formal definition or flag to identify pre-apprenticeships in the national VET administrative collections; however, apprenticeships at certificate II level are expected to provide prevocational outcomes such as a pathway into an apprenticeship.

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table 3 Apprenticeship[1] commencements by age and qualification level, 12 months ending December 2004, 2009 and 2013

	2004	%	2009	%	2013	%
24 years and under						
Diploma or higher	22	0.0	122	0.2	85	0.1
Certificate IV	945	1.6	2 005	3.5	2 280	3.9
Certificate III	58 662	97.4	54 611	95.5	56 297	95.6
Certificate I and II	618	1.0	458	0.8	212	0.4
Total	**60 247**	**100.0**	**57 196**	**100.0**	**58 873**	**100.0**
25 to 44 years						
Diploma or higher	6	0.1	193	1.2	173	0.6
Certificate IV	685	7.5	3 571	22.5	6 878	23.7
Certificate III	8 301	91.5	12 046	75.9	21 907	75.6
Certificate I and II	85	0.9	54	0.3	25	0.1
Total	**9 077**	**100.0**	**15 864**	**100.0**	**28 983**	**100.0**
45 years and over						
Diploma or higher	1	0.1	96	1.8	46	0.4
Certificate IV	300	20.6	1 644	31.6	4 205	40.2
Certificate III	1 143	78.3	3 462	66.5	6 202	59.3
Certificate I and II	15	1.0	6	0.1	9	0.1
Total	**1 459**	**100.0**	**5 208**	**100.0**	**10 462**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Characteristics of an adult apprentice

Using 2013 commencements data, table 4 shows the various characteristics of adult apprentices and indicates that an older apprentice is typically male (as is the case for younger apprentices), an early school leaver, an existing worker, from a major city and with no prior qualification.

There are no remarkable differences in characteristics when size of employer is considered; however, older apprentices are more likely to be employed with large employers (17.6% for those aged 25 to 44 years and 21.6% for 45 years and over compared with 8.8% for those 24 years and under).

Table 4 Apprenticeship[1] commencements by selected characteristics, 12 months ending December 2013

	24 years and under		25 to 44 years		45 years and over	
	Number	%	Number	%	Number	%
Sex						
Male	50 121	85.1	25 007	86.3	8 332	79.6
Female	8 752	14.9	3 977	13.7	2 130	20.4
Full-time status						
Full-time	52 015	88.4	27 715	95.6	9 805	93.7
Part-time	6 858	11.6	1 268	4.4	657	6.3
Size of employer[2]						
Small	32 617	55.4	10 851	37.4	3 238	31.0
Medium	6 891	11.7	4 156	14.3	1 828	17.5
Large	5 156	8.8	5 108	17.6	2 257	21.6
Not known	14 209	24.1	8 867	30.6	3 139	30.0
Existing worker						
Existing worker	5 073	8.6	16 383	56.5	8 249	78.8
Not existing worker	53 801	91.4	12 600	43.5	2 213	21.2
Prior education						
Prior education	22 261	37.8	15 589	53.8	4 396	42.0
No prior education	36 612	62.2	13 394	46.2	6 066	58.0
Highest school level completed						
Year 12	26 883	45.7	16 071	55.4	3 463	33.1
Year 11	11 107	18.9	4 436	15.3	1 811	17.3
Year 10	16 256	27.6	6 872	23.7	3 952	37.8
Year 9 or lower or did not go to school	3 953	6.7	1 339	4.6	1 013	9.7
Indigenous status						
Indigenous	2,469	4.2	819	2.8	209	2.0
Not indigenous	55 956	95.0	27 750	95.7	10 044	96.0
Disability status						
With a disability	1,108	1.9	385	1.3	148	1.4
Without a disability	57 249	97.2	28 293	97.6	10 183	97.3
Client remoteness (ARIA+)						
Major cities	34 563	58.7	18 398	63.5	6 592	63.0
Inner regional	15 464	26.3	6 300	21.7	2 336	22.3
Outer regional	6 960	11.8	3 243	11.2	1 214	11.6
Remote or very remote	1 653	2.8	923	3.2	300	2.9
Total[3]	**58 873**	**100.0**	**28 983**	**100.0**	**10 462**	**100.0**

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

2 There is a high proportion of not known information for the employer size data element. For this reason, caution should be taken when using these data.

3 Not known data for prior education, highest school level completed, Indigenous status, disability status, and client remoteness were not separately reported in the table but were included in the total.

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

More existing workers commencing a trade

Table 5 shows a clear trend in terms of a greater proportion of existing workers (defined as having been employed for less than three months) commencing a trade apprenticeship or traineeship in 2013 (30.2%) compared with 2004 (9.1%). From 2013 however changes to the Australian Apprenticeships Incentives Program may impact on this trend in the future. Only

existing workers who are undertaking qualifications that lead to an occupation on the National Skills Needs List (NSNL) will be eligible.[2]

Table 5 Trades[1] commencements by existing worker, 12 months ending December 2004–13

	Existing worker	Not existing worker	Total	% existing worker
2004	6 473	64 285	**70 788**	9.1
2005	7 182	66 550	**73 738**	9.7
2006	7 163	69 486	**76 653**	9.3
2007	9 019	75 057	**84 080**	10.7
2008	11 408	75 161	**86 574**	13.2
2009	16 624	61 644	**78 268**	21.2
2010	18 066	78 336	**96 403**	18.7
2011	18 606	73 083	**91 689**	20.3
2012	26 327	69 738	**96 065**	27.4
2013	29 705	68 614	**98 319**	30.2

Note: 1 'Trades' refers to apprentices and trainees employed in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

The time to complete a trade qualification is changing

And finally, the time taken to complete a trade qualification is changing. In 2013, 44.1% of trade apprentices and trainees completing at certificate III and above finished their apprenticeship in two years or fewer, compared with 28.4% in 2004 (see table 6).

Table 6 Trades[1] completions at certificate III or higher by duration of training, 12 months ending December 2004–13

	Up to 2 years	Over 2 and up to 3 years	Over 3 years	Total	% up to 2 years
2004	8 534	4 826	16 672	30 032	28.4
2005	8 438	5 149	16 436	30 023	28.1
2006	9 716	5 981	19 081	34 778	27.9
2007	10 648	6 818	21 656	39 122	27.2
2008	11 514	7 236	24 699	43 449	26.5
2009	13 200	8 288	24 813	46 301	28.5
2010	15 895	9 549	26 620	52 064	30.5
2011	20 276	9 071	26 109	55 456	36.6
2012	20 869	10 041	24 032	54 942	38.0
2013	26 008	10 848	22 077	58 933	44.1

Note: 1 'Trades' refers to apprentices and trainees employed in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

A profile of adult apprentices in accelerated apprenticeships: a case study of the National Apprenticeships Program

As mentioned, the National Apprenticeships Program is a national initiative designed to encourage the completion of apprenticeships within a reduced timeframe and is intended

[2] See Australian Government Apprenticeships Incentives Program summary: <http://www.australianapprenticeships.gov.au/sites/prod.australianapprenticeships.gov.au/files/publication-documents/Summary%20of%20the%20Australian%20Government%20Australian%20Apprenticeships%20Incentives%20Program%20-%201%20July%202014.pdf>.

for both the existing workforce and the general population with relevant experience. As expected, the clear majority of participants are aged over 25 years, reflecting the main intent of the program, which is to place experienced adults into alternative pathway apprenticeships (see table 7). Similar to the profile presented from the national commencements data, the majority of older apprentices in this program are male and existing workers.

Table 7 NAP participants[1] from 2011 to 2014[2] by age group and selected demographics

	24 years and under		25 years and over	
	Number	%	Number	%
Sex				
Males	27	100.0	215	99.5
Females	0	0.0	1	0.5
State of origin				
New South Wales	0	0.0	0	0.0
Victoria	0	0.0	0	0.0
Queensland	25	92.6	195	90.3
South Australia	0	0.0	0	0.0
Western Australia	2	7.4	21	9.7
Tasmania	0	0.0	0	0.0
Northern Territory	0	0.0	0	0.0
Australian Capital Territory	0	0.0	0	0.0
Employment status at time of application				
Employed (existing workers)	25	92.6	215	99.5
Not employed	2	7.4	1	0.5
Total	**27**	**100.0**	**216**	**100.0**

Notes: 1 This includes NAP participants who obtained the required portion of RPL, passed the 100-day selection process and who commenced an apprenticeship contract through NAP.

2 The table includes NAP participants from commencement of the pilot program in 2011 to completion of the pilot program on 30 April 2014.

Source: Derived from East Coast Apprenticeships NAP database.

Table 8 provides information on the trade-related experience and backgrounds of NAP participants in more detail than is possible in the national administrative datasets. Based on this case study of NAP data, we find that an older apprentice undertaking an advanced entry apprenticeship typically obtained their previous experience from an existing aligned trade (44.0%) and through prior work as a trades assistant (24.5%). The background of the remaining older apprentices in NAP was fairly evenly split between those with defence force experience, a previous uncompleted apprenticeship and an overseas qualification. It was not possible to obtain specific data on the levels of prior qualifications for NAP participants.

Table 8 NAP participants[1] who completed the RPL component and were selected to participate in an accelerated apprenticeship[1] from 2011 to 2014[2] by age group and previous experience

	24 years and under		25 years and over	
	Number	%	Number	%
Existing aligned trade	13	48.1	95	44.0
Out of trade (completed part of an apprenticeship)	6	22.2	22	10.2
Defence force experience	3	11.1	21	9.7
Overseas qualification(s)	0	0.0	25	11.6
Existing trades assistant	5	18.5	53	24.5
Total	**27**	**100.0**	**216**	**100.0**

Notes: 1 This includes NAP participants who obtained the required portion of RPL, passed the 100-day selection process and who commenced an apprenticeship contract through NAP.

2 The table includes NAP participants from commencement of the pilot program in 2011 to completion of the pilot program on 30 April 2014.

Source: Derived from East Coast Apprenticeships NAP database.

Industries experiencing skill shortages are increasingly turning to experienced and/or semi-skilled mature-age workers to fill gaps.

Apprenticeship pathways and models of earlier (accelerated) completion

A traditional apprenticeship model is associated with its completion specified in a nominal time period, typically ranging from three to four years. This model now competes with various alternative options that facilitate faster progression and earlier completion.

While the traditional model of apprenticeship is still well regarded and not failing, it does need to evolve to remain useful and relevant (Callan 2008). More recently, Jennifer Westacott, CEO of the Business Council of Australia, stated: 'our rigid apprenticeship system will not keep pace with the speed at which people will need to retrain and obtain new qualifications' (Westacott 2014).

There is a 'consistent view of the potential role that adult apprenticeships play in contributing to economic recovery and effective workforce planning' (Mitchell, Dobbs & Ward 2010, p.19). A commonly accepted opinion today is that if completion times can be reduced, then the system can be more responsive to changes in the demand for skilled trades, which is particularly important given the close ties between trade apprenticeship commencements and the economic cycle.

Industries experiencing skill shortages are increasingly turning to experienced and/or semi-skilled mature-age workers to fill gaps:

> The economic boom from 2000 to 2008 stretched the capacity of the apprenticeship system to supply the numbers of qualified tradespeople needed by employers in key industries such as mining, and building and construction, even though apprenticeship and traineeship commencements increased. This prompted debate about whether skill shortages are inevitable during economic booms, or whether governments could do more to ameliorate the problem. It also prompted the Council of Australian Governments to accelerate reforms such as moving from time-based to competency-based completion of apprenticeships. (Knight 2012, p.22)

The option of earlier completion assists in attracting more mature workers with valuable life experiences and skills into an occupation (Knight, Karmel & Guthrie 2011). Interestingly, in 2002 Saunders and Saunders noted that, while there had been cautious experimentation with alternative pathways, these were not common in the traditional trades, so it is 'not surprising that shortages might occur in some trades' (Saunders & Saunders 2002, p.8). On the other hand it is recognised that adult apprentices on an advanced entry pathway will not suit all employers. While an adult may offer maturity, immediate productivity gains and potential leadership capabilities, some employers remain committed to offering an apprenticeship to youth from their local communities or areas (Fraser, Murray & Dixon 2014).

In Canada Empey and Newton (2009) found a relationship between prior learning assessment and recognition (PLAR) and skill shortages. 'Bad' PLAR can contribute to skill shortages if unqualified tradespeople are exempted from blocks or levels of technical training and may ultimately undermine the quality of the workforce. 'Good' PLAR ensures that skill gaps are identified and can be addressed, thus reducing the possibility of skill shortages. They found

'slow or inefficient PLAR processes can delay the recognition of skilled workers and deter new applicants'. They go on to suggest that 'standardising PLAR policies and procedures for apprenticeship across Canada is difficult however co-ordination of practice among provinces/territories is possible and there is an economic benefit to recognising skills, and effective PLAR allows this process to occur more efficiently' (Empey & Newton 2009 p.2658).

Individuals experiencing retrenchment in declining sectors may benefit from alternative pathways in their efforts to reskill and find employment or advanced entry into a different or complementary trade.

Individuals experiencing retrenchment in declining sectors may benefit from alternative pathways in their efforts to reskill and find employment or advanced entry into a different or complementary trade. For the individuals concerned, it may mean a commitment to the reskilling process and willingness to 'start at the bottom', potentially with lower wages, but also increased prospects for advancement as new skills are gained and the capacity to draw heavily on previous skills and experience comes into play. As Misko (2008, p.9) notes:

> Traditional trade skill shortages in Australia heighten the need to accelerate the completion of formal apprenticeship programs which, historically, have been based on a combination of formal off-the-job and on-the-job learning … these programs generally use recognition of prior learning processes to recognise the skills and experience of mature-age workers with relevant industry skills. In addition there is a need to deepen initial training for those industries such as mining, electro-technology and energy utilities which require higher level initial skills.

Approaches to models facilitating earlier completion

There are various approaches to facilitating faster progression in an apprenticeship:

- The application of competency-based training itself supports individuals who have the capability to complete their apprenticeship earlier than the traditional time-served model. Through decisions reached by the Council of Australian Governments (COAG), the Commonwealth and the states/territories have formalised support for competency-based training progression, and all have existing legislation to enable competency-based training progression for apprentices and trainees. Despite this, the model has not been widely adopted (Australian Government 2011a).
- A common approach has been to shorten nominal durations, in consultation with industry, and to redesign programs, with a significant increase in the off-the-job component of training occurring up-front (Knight, Karmel & Guthrie 2011).
- The concept of 'early sign-off' has been adopted in some industries, especially those that may have had issues with keeping apprentices during times of economic downturn. This enables apprentices to have their contracts of training signed off early if they have completed all of their off-the-job training and 75% of their contract term (Karmel & Misko 2009).
- Another option includes the use of recognition of prior learning (or recognition of current competency) to acknowledge the practical skills gained from experience in a trade and from other informal learning, in combination with tailored gap training (skill sets), to complete a trade qualification or certificate (often referred to as 'advanced entry adult apprentices').

While all jurisdictions embrace the principles of these models, the pace and approach to their implementation has varied. In addition, the actual procedures for accelerated

completion differ greatly by jurisdiction, with various combinations of the apprentice, employer, registered training organisation and training authorities or Australian Apprenticeship Centres involved in who initiates the process and who does the final sign-off (Knight, Karmel & Guthrie 2011).

This implies that a one-size-fits-all model for earlier completion may not be possible and some flexibility is required to accommodate different industry requirements. It is also possible that the various approaches create confusion and barriers for employers, providers and adult apprentices. The reasons for these differences in approach warrant further study.

Implications of models facilitating earlier completion

The advantages and barriers of a competency-based progression model for apprentices are summarised in table 9.

Table 9 Advantages and barriers to a competency-based progressions system

Advantages for the apprentice or trainee	Advantages for the employer	Barriers to the wider acceptance of competency-based progression
▪ Achieving a qualification in a shorter timeframe ▪ Allowing experienced individuals who are not formally qualified to gain nationally recognised formal qualifications ▪ Attracting more mature workers to an apprenticeship or traineeship due to the potential for a shorter training period and reduced opportunity costs to themselves and their families ▪ Increasing application of recognition of prior learning and recognition of current competencies (RCC), which can allow for earlier completion of training ▪ Support for apprentices or trainees who need additional time to attain competency ▪ Support to provide early sign-off for an apprentice who otherwise might not be able to finish as the result of an economic downturn	▪ Increasing the pool of qualified tradespersons, especially during an economic boom ▪ Increasing the focus on on-the-job training with associated productivity benefits for the business ▪ Introducing the potential for more flexible forms of training partnerships and cooperation between employers and RTOs, with less time away from the workplace ▪ Increased levels of work and life experience and prior qualifications, which adult apprentices often bring with them ▪ Increasing productivity of employees, who will be qualified more quickly. – This also counteracts the effects and impacts on the organisation if employees are not fully proficient in their job, such as increased workload for other staff, not being able to take on as much business as they would like, and difficulties in introducing technological change and introducing new working practices (NCVER 2013b, table 6)	▪ Concern that faster completion may compromise the quality of the training and the skills acquired; particularly problematic if quality is not defined and measurable ▪ Licensing and regulatory arrangements for trade qualifications that do not accommodate competency-based progression ▪ Industry and employer attitude and resistance to change ▪ Implications of competency-based wage progression and perceived return on investment for the employer either paying a higher wage sooner or paying an adult apprentice for whom earlier progression particularly suits ▪ Inflexibilities of training packages ▪ Occupational health and safety requirements, particularly in licensed trades. ▪ Training and assessment methodologies and mentoring approaches may require adaptation to accommodate the adult student, who, while committed and more mature, may also be more demanding and critical

Advantages for the apprentice or trainee	Advantages for the employer	Barriers to the wider acceptance of competency-based progression
		▪ With respect to the use of RPL in particular to facilitate earlier completion: – Training providers need the capability to provide flexible blended delivery and personalised training plans ▪ The underlying assumption of the traditional apprenticeship model as benefiting both the employer and employee is challenged – assuming the main benefits of RPL rest with the apprentice not the employer

Note: Adapted from Australian Government (2011b).

A highly contested debate is whether the *quality* of the apprenticeship has been compromised. Indeed supporters of alternative models do not use the terms 'accelerated' or 'fast-tracked' because they believe it incorrectly implies that shortcuts have been taken in the approach to skill development. Critics of earlier completion are generally employers who have had 'bad experiences' with premature sign-off. They argue that a minimum amount of time is needed (per the traditional apprenticeship model) for an apprentice to achieve the intended learning outcomes (University of Sydney, Workplace Research Centre 2012; Knight, Karmel & Guthrie 2011; Manufacturing Skills Australia 2014). As Knight, Karmel and Guthrie (2011, p.72) note:

> Employers and qualified tradespeople, particularly in traditional trade areas, often retain a preference for the time-served system because *that is how they were trained*. Others suggest that early completion decreases the 'roundedness' of the training experience and perhaps increases the occupational health and safety and other risks of early completers who are not fully competent.

Key themes in the literature point to the need for promoting a *culture* of competency-based rather than time-based progression in apprenticeships, in partnership with industry and employers (Fine 2006; Australian Industry Group 2010; Mitchell, Dobbs & Ward 2010; Australian Government 2011a, 2011b). This is important given the overall positive response to hiring an adult apprentice:

> 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. [Yet] 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.
>
> (Saunders & Saunders 2002, p.8)

Improvements to the implementation of the practices associated with the recognition of prior learning and a training system that supports flexible options for delivery are required before this cultural shift in apprenticeships can be fully realised (Australian Government 2011b), let alone all industries supporting such a shift, especially as it relates to the cost benefit:

> Employers do not have a strong incentive to sign an apprentice off early as it results in wage increases and a decreased time to recoup the costs of training. Many employers are concerned that accelerated completion will increase the risk of losing a valued employee when they finish their contract. (Knight, Karmel & Guthrie 2011, p.72)

Some training providers remain concerned about the potential for more attrition and the extra administrative and resource burden they believe accompanies a more flexible and intensive approach.

Others have suggested that the acceleration options can generally be accommodated within current arrangements. The issue lies with *awareness* — industry, the apprentices involved, and in some cases registered training organisations are either completely unaware of the options available to them or they are not well known or understood (Australian Industry Group 2010; Mitchell, Dobbs & Ward 2010; Dunn et al. 2011). Some training providers remain concerned about the potential for more attrition and the extra administrative and resource burden they believe accompanies a more flexible and intensive approach. Knight, Karmel and Guthrie (2011, p.77) suggest:

> To successfully implement accelerated completions requires effective cooperation between enterprises and training institutions. It needs higher levels of administrative supports. The approach may not suit some types of learners particularly those who are younger, have learning difficulties and other personal issues. It is not a cheap option. An obvious radical solution is to dispense with the contract of training and replace it with shorter-duration institutional programs.

One of the seminal pieces of work in this area was conducted by the Australian Industry Group. Their 'Faster, Smarter, Higher Trade Outcomes' project was established in 2007 to 'consider a variety of training options which would result in apprentices gaining their trade qualifications more quickly and/or supplementing their trade training with a higher or broader skills outcome' (Australian Industry Group 2010, p.4).

Five pilot projects were conducted across the manufacturing sector, in a range of companies and across a variety of training organisations, and encompassed the full range of combinations of acceleration and higher qualifications — new entrants, existing apprentices, concurrent and higher trade-level qualifications, upfront training and combined on- and off-the-job training. A number of important findings resulted from the project, many of which are still relevant today and of interest to this current study:

- The opportunity to develop supplementary skills is valued by new entrants to the trades *and* established tradespeople.
- An accelerated program is not suitable for all apprentices; apprentices in the pilots were selected on the basis that they were already coping well with their training and most can cope with an increased training workload, with employer support.
- Employers generally support an accelerated program, although it is more difficult to continue with this approach in weaker economic conditions.
- Training quality is an issue.
- State training package implementation issues have a considerable impact on the speed with which new qualifications can be made available.
- Take-up of training is linked to funding and is influenced by many factors beyond the training system, such as the economic cycle.
- Changed training arrangements require administrative flexibility.

Of particular interest is the Australian Industry Group's recommendation of the need for targeted funding in strategically important skill sets.

> The project demonstrated apprentices, tradespeople and their employers value the opportunity to expand the traditional training received; in many instances this training took the form of a skill set. But the current funding arrangements mean that, outside

> projects such as this, the provision of this training is only available on a fee-for-service basis. (Australian Industry Group 2010, p.7)

In their study on competency-based progression and its use in group training environments, the Workplace Research Centre at the University of Sydney considered the way by which the model is pragmatically used at the workplace level. Group training organisations play a role in making decisions to accelerate or early-complete an apprentice. Their study suggests they do this with two factors in mind: 'the capabilities of the apprentice, and the opportunities for employment anticipated being available at the time of completion' (University of Sydney, Workplace Research Centre 2012, p.29).

Further, group training organisations tend to associate certain apprentice characteristics with greater 'suitability' for competency-based progression, reporting 'less success, overall, when competency-based progression was applied to younger, "less mature" apprentices'. As the CEO of a regional group training organisation stated: 'I don't believe CBTP [competency-based training progression] has serious flaws. But if you asked me if it is appropriate in all circumstances, I would say no' (University of Sydney, Workplace Research Centre 2012, p.29). These concerns stem from the argument that competency-based progression is often considered more demanding on the apprentice, 'because stakeholders assumed acceleration through training' (University of Sydney, Workplace Research Centre 2012, p.29). They go on to suggest that (p.32):

> Competency-based progression has been most effective, overall, with older, more experienced workers. This includes those seeking RPL to accelerate their completion, up-skilling, or those making lateral movements into different areas of work to improve their employability.

In a study that focuses on pilots of accelerated apprenticeships in the automotive trades in Queensland, Callan examines the perceptions of apprentices, employers and teachers of the strengths and shortcomings of both traditional and accelerated approaches. He concludes that accelerated models offer obvious benefits but they will usually be more expensive, imposing additional costs as well as pressures upon apprentices, employers and trainers. Callan (2008) lists several shortcomings of the traditional apprenticeship model:

- the tradition of time-based apprenticeships continued by many employers, despite the fact that competency-based models allow advanced completion well under the expected four years
- the failure to apply recognition of prior learning to recognise the existing knowledge and skills of those who enter into apprenticeships
- continued evidence that competency-based training is not fully understood by apprentices, employers and training providers.

To achieve results in shorter timeframes, accelerated apprenticeships must incorporate innovative upfront training; intensive pre-apprenticeship training; the full application of recognition of prior learning; intensive forms of off-the-job-delivery; and industry investment in workplace mentors (Callan 2008).

Because of the Council of Australian Governments' push to promote accelerated apprenticeships, a much higher proportion of adult apprentices are completing their apprenticeship within two years, compared with ten years earlier.

Government support for alternative models

The Australian Government has made its support for alternative models of apprenticeship training perfectly clear:

> We believe it is important for stakeholders to make genuine efforts to address real cultural change, and acknowledge the real benefits that can be derived from the widespread introduction of competency-based progression into the Australian Apprenticeships system. We acknowledge that, while the Australian Government may promote competency-based training progression, in reality, it requires an effective relationship between training providers to interact with employers and engage them in competency-based training progression. We think there are measures that industry and training providers could adopt to promote competency-based training progression. All qualified training institutions should be encouraged to implement national competency-based assessment tools that can be adapted for individual industry sectors
>
> (Australian Government 2011b, p.94)

The Australian Government (2013a) previously made funding available under an 'Accelerated Australian Apprenticeships' program to support industry-led partnerships, a program whereby innovative strategies for competency-based progression in a number of occupational areas were developed and implemented. Several projects were funded, including one enabling the Australian Industry Group to develop and promote competency-based progression in the engineering trades; the ElectroComms and Energy Utilities Industry Skills Council for electrotechnology apprentices; Printing Industries Australia for certificate III printing qualifications; as well as the Restaurant and Catering Industry Association of Australia and Woolworths Limited. Appendix D identifies other projects focusing on models of earlier completion and support for mature-age workers.

More recently the Australian Government announced its 'Alternative Pathways to the Trades' project in the 2013—14 Budget, which aimed to trial alternative approaches to traditional apprenticeships (Australian Government 2013b). The rationale behind this initiative was to speed up the process through which skilled tradespeople become qualified; however, this project has not progressed (Department of Industry, pers. comm. 27 October 2014).

The following is a useful website providing information for people looking for a career change and to get training in a new trade: <http://matureageapprenticeships.org/>.

Proportion of adult apprentices completing earlier

Perhaps because of the Council of Australian Governments' push to promote accelerated apprenticeships, table 10 shows that a much higher proportion of adult apprentices are completing their apprenticeship within two years, compared with ten years earlier. In 2013, over half (56.2%) of certificate III or higher apprenticeships were completed within two years for the 25 to 44-year-old age group, compared with 42.0% in 2004. Almost four-fifths (81.9%) of apprentices aged 45 years and over are now completing a certificate III or higher apprenticeship within two years, compared with 65.2% in 2004.

Table E1 in the appendix shows variations by jurisdiction.

Table 10 Apprenticeship completions[1] at certificate III or higher by age group and duration of training, 12 months ending December 2004 and 2013

	Up to 2 years	Over 2 and up to 3 years	Over 3 years	Total	Total number
	%	%	%	%	Number
2004					
24 years and under	23.6	14.7	61.7	100.0	23 492
25 to 44 years	42.0	20.8	37.1	100.0	5 511
45 years and over	65.2	21.9	12.9	100.0	1 029
Total	**28.4**	**16.1**	**55.5**	**100.0**	**30 032**
2013					
24 years and under	29.7	20.0	50.3	100.0	33 842
25 to 44 years	56.2	18.1	25.8	100.0	17 855
45 years and over	81.9	11.8	6.3	100.0	7 236
Total	**44.1**	**18.4**	**37.5**	**100.0**	**58 933**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection based on March 2014 estimates.

Existing workers with no prior education are common users of the shortened apprenticeship pathway amongst those aged 25 years and over.

A further analysis of the certificate III or higher apprenticeships completed within two years shown in tables 11 and 12 and appendix E provides some contextual information on who is undertaking shortened apprenticeships. We are however unable to determine the *type* of early completion model being used. The 2013 certificate III or higher completions data suggest:

- Existing workers with no prior education are common users of the shortened apprenticeship pathway amongst those aged 25 years and over.
- Non-existing workers with no prior education are common users of the shortened apprenticeship pathway amongst those aged 24 years and under.
- Just over a quarter of the shorter-duration completions by those aged 25 years and over were within the Manufacturing Training Package.
- Around a third of the shorter-duration completions by those aged 25 years and over were within the manufacturing industry (based on the industry of the employer).
- Almost a third of the shorter-duration completions by those aged 25 years and over were for apprentices employed within small firms.[3]

[3] Employer size is based on the number of people employed by the firm in Australia. There is a high proportion of not known information for the employer size data element. For this reason, caution should be taken when using these data.

Table 11 Apprenticeship completions[1] at certificate III or higher and training duration up to two years by age group, existing worker status and prior education, 12 months ending December 2013

	24 years and under		25 years and over	
	Number	%	Number	%
Existing worker				
Prior education	617	6.1	4 884	30.6
No prior education	586	5.8	6 393	40.1
Existing worker total	*1 203*	*12.0*	*11 277*	*70.7*
Not existing worker				
Prior education	2 956	29.4	2 273	14.2
No prior education	5 893	58.6	2 405	15.1
Not existing worker total	*8 850*	*88.0*	*4 678*	*29.3*
Total	**10 053**	**100.0**	**15 956**	**100.0**

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection based on March 2014 estimates.

Table 12 Apprenticeship completions[1] at certificate III or higher and training duration up to two years by age group and employer industry (ANZSIC[2]), 12 months ending December 2013[3]

	24 years and under		25 years and over	
	Number	%	Number	%
Manufacturing	955	9.5	5 299	33.2
Construction	2 694	26.8	2 557	16.0
Information media and telecommunication	817	8.1	1 063	6.7
Mining	186	1.9	948	5.9
Health care and social assistance	86	0.9	752	4.7
Administrative and support services	851	8.5	683	4.3
Other services	1 578	15.7	677	4.2
Public administration and safety	173	1.7	644	4.0
Professional, scientific and technical services	356	3.5	636	4.0
Accommodation	959	9.5	547	3.4
Agriculture, forestry and fishing	161	1.6	490	3.1
Electricity, gas, water and waste services	168	1.7	411	2.6
Transport, postal and warehousing	125	1.2	349	2.2
Retail trade	314	3.1	329	2.1
Wholesale trade	162	1.6	311	1.9
Education and training	307	3.1	127	0.8
Arts and recreation services	126	1.3	102	0.6
Rental, hiring and real estate services	18	0.2	22	0.1
Financial and insurance services	18	0.2	6	0.0
Not known	1	0.0	3	0.0
Total	**10 053**	**100.0**	**15 956**	**100.0**

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

2 ANZSIC = Australian and New Zealand Standard Industrial Classification.

3 Table sorted from highest to lowest based on the completions for the 25 years and over age group.

Source: Derived from the National Apprentice and Trainee Collection based on March 2014 estimates.

The accelerated model particularly suits adult apprentices — especially existing workers with no prior education. They may be individuals seeking to upskill, or those with industry experience gained from working in unskilled and semi-skilled roles, or new entrants to an industry. While there has been widespread support for a variety of models that facilitate earlier completion, and the data confirm that apprenticeships of shorter duration are growing for adult apprentices, there remain a number of cultural and systemic issues that need to be addressed. These necessarily challenge the historical understanding of what an apprenticeship is designed to achieve.

Earlier completion via an accelerated apprenticeship program: a case study of the National Apprenticeships Program

So far, there have been 68 participants in the National Apprenticeships Program who have completed a qualification (see table 13). A further 161 were still in progress at the time of the analysis and 14 had cancelled their apprenticeship.

The majority (60.0%) of NAP completers aged 25 years and over completed the program within an 18 to 24-month timeframe. A further 24.6% of NAP completers aged 25 years and over completed the program within 12 to 18 months. A small proportion (10.8%) completed the program within a 12-month period.

Table 13 NAP program completers 2011–14 who obtained a qualification on completion of the program by age group[1] and duration of apprenticeship

	24 years and under		25 years and over	
	Number	%	Number	%
Up to 9 months	0	0.0	3	4.6
Over 9 months and up to 12 months	1	33.3	4	6.2
Over 12 months and up to 18 months	0	0.0	16	24.6
Over 18 months and up to 24 months	2	66.7	39	60.0
Over 24 months	0	0.0	3	4.6
Total	3	100.0	65	100.0

Note: 1 'Age group' is based on age on completion.

Source: Derived from East Coast Apprenticeships NAP database.

It is widely accepted that recognising previously unrecognised skills and experience is beneficial for both individuals and employers.

The significance of RPL in apprenticeships

We begin this section with a summary from the literature on the broad concepts of RPL as they relate to the adult apprentice, considering its importance and benefits but also the challenges and impacts on the individual and employers.

Data from the National Apprentice and Trainee Collection suggest that older apprentices are on the rise and that an increasing proportion of apprenticeships are completed within two years (see earlier section on recent trends). This section therefore explores the take-up of RPL as a pathway for older apprentices into a skilled trade occupation. In particular, we are interested in quantifying how much RPL activity relates to older trade apprentices and understanding whether there is demand for programs focused on accelerated apprenticeships for older workers.

There has been a relative increase in the amount of uptake of recognition of prior learning reported in NCVER data. In 2013 the RPL granted represented 8.2% of all full-year training equivalents, up from 5.8% in 2009 (NCVER 2014a). The national administrative VET collections and the Student Outcomes Survey collectively provide a picture of the significance of the RPL pathway, noting that there are some gaps in the data.[4] The National VET Provider Collection points to a small but growing segment of adult apprentices taking up the RPL option. Our small case study on the NAP supplements the national data and shows that there is significant demand for shortened apprenticeship programs of this kind.

Why RPL is important

It is widely accepted that recognising previously unrecognised skills and experience is beneficial for both individuals and employers. Recognition of prior learning is promoted as a strategy for: getting existing skills formally recognised; facilitating further skills acquisition; and allowing for qualification completion in a shorter time. Skills recognition practice in Australia is governed by a set of underpinning policies and principles, outlined in the Australian Qualifications Framework, with only registered (or enterprise-based) training organisations able to undertake such assessments.[5]

By reducing the amount of training needed, initiatives such as RPL are significant in terms of reducing the barriers to engaging in formal learning, a factor particularly relevant to adult learners. Previous research has confirmed the well-known barriers for adults participating in skills development: employer attitudes; lack of information about options; competing pressures from work and family commitments; financial difficulties; attitudes to participation; preferences for learning informally; and fear of failure (see, for example, Ferrier, Burke & Selby Smith 2008).

[4] The National VET Provider Collection and the Student Outcomes Survey currently only cover the publicly funded VET system. The National Apprentice and Trainee Collection reports all apprentices and trainees, but does not provide information on how many apprentices obtain RPL.

[5] <http://www.aqf.edu.au/>.

Several studies in particular highlight the importance of RPL for adult apprentices, not surprisingly, given it is via these individuals that the benefits of an RPL pathway can be fully realised (Callan 2008; Mitchell, Dobbs & Ward 2010).

Modest increases in the uptake of RPL have occurred, but the provision of these services by registered training organisations and the take-up among students have not met expectations.

Much of the discussion associated with the recognition of prior learning relates to its use *upfront*: to indicate progress towards a qualification and to identify the required gap training. However, RPL can also be granted *during* an apprenticeship, for example, if the employer and apprentice agree that the apprentice is competent when training and experience on the job have been delivered prior to off-the-job training.

> The assumed goal of a skills recognition process is to assist an applicant to gain all or part of a recognised qualification if they indeed can demonstrate that they can apply their current skills and knowledge to new situations and contexts. (Davies 2014, p.78)

Challenges of the RPL pathway

Despite the importance of recognition of prior learning, it is not an *easy* or *stand-alone* option. As the data attest, modest increases in the uptake of RPL have occurred, but the provision of these services by registered training organisations and the take-up among students have not met expectations. There are instances of RPL not being used effectively, with good practice RPL proving complicated and expensive (Hargreaves 2006). Individual choice is a factor with many learners, and especially older learners, who choose to 'relearn' as a way of confirming or refreshing their skills and knowledge rather than paying for an RPL assessment. And if the time and cost involved in an RPL application comes close to the cost of the training itself, then any benefits of choosing the RPL option, especially if there's a likelihood of its being unsuccessful, are diminished. This suggests there are broader issues around the funding model of RPL that may need to be considered.

In the early days those most likely to use RPL were individuals already established in the workforce and with significant education capital from which to draw (Cameron 2004). The appeal of RPL was diminished amongst those it was hoping to reach, especially people with poor literacy for whom it can be difficult to produce evidence of prior skills (Australian Workplace Productivity Agency 2014) or to complete gap training via self-based learning approaches (Misko 2008). When RPL is used upfront individuals may need personalised training plans, as each person has a different starting point and gap-training requirement. Lock-step training cycles are often not compatible, and a successful approach requires training providers who can offer flexible and blended delivery modes to complement the RPL assessment.

Some argue that the complexity of the systems governing RPL means it is not meeting the requirements of employers and it therefore remains a relatively hidden option (Ferrier, Burke & Selby Smith 2008). The advice given by providers on RPL (and credit transfer) can also be inconsistent and ad hoc, leading to confusion in how to engage with the process. There is resistance by trainers to embrace workplace evidence gathering and assessment, also leading to confusion over the range and quantum of evidence required to demonstrate competency (Hargreaves 2006; Forbes 2008; Australian Government 2011a). As Callan (2008, p.32) comments in relation to the application of recognition of prior learning:

> Employers need to be more supportive about its use to reduce the repetition and redundancy clearly apparent in apprenticeships for people with some industry experience gained through semi-skilled activities. To facilitate this process of recognition of prior learning, the training provider needs to complete up front a review

Although some industry sectors have adopted strategies for the broad implementation of the assessment of RPL and existing competencies, this has not been universal.

of all elements of the off-the-job training component of qualifications. This action determines that the content is relevant to the employer and that there is a match between the required competencies of an employer and the competencies present in training packages.

In response to the apparent poor rates of RPL and real or perceived barriers to its successful use, much work has been done nationally and in jurisdictions to identify and target areas of concern. In 2006 the Council of Australian Governments funded a three-year RPL program, in which the states and territories made significant efforts to streamline and simplify RPL processes and build the VET system's capacity to deliver quality RPL (Leary 2009). This has seen a sustained commitment to ensuring that the recognition of prior learning can be accessed and utilised more effectively, which is reflected by the increase in numbers undertaking RPL over more recent years.[6]

The outcomes of the three-year COAG-funded RPL program identified a number of activities targeting traditional trade areas experiencing skill shortages and the development of innovative and cost-effective RPL solutions integrated with enterprise workplace activities (Leary 2009). Although some industry sectors have adopted strategies for the broad implementation of the assessment of RPL and existing competencies, this has not been universal (Australian Government 2011a).

In a recent study for the Fair Work Commission[7] Dunn et al. (2011) found that, even for employers and apprentices with experience of RPL, they were unable to explain what it entailed in detail. Many did not know how this form of competency-based progression informed wage setting; and employers were generally taking the advice of the RTO to determine how RPL affected the training of the apprentice (Dunn et al. 2011).

Most of the apprentices in the Fair Work Australia study were actually using course credit transfers for their competency-based progression arrangements. This was considered to be a relatively straightforward process because they could readily produce statements of attainment, although variations were reported in the way by which credit was granted or not granted and there were instances of training being re-done because of perceived concerns around training quality (Dunn et al. 2011).

In 2010 the Australian Chamber of Commerce and Industry (ACCI) undertook a study of employers which examined their views and opinions about increasing the apprenticeship pathways for mature-age and existing workers (Mitchell, Dobbs & Ward 2010). Their study suggests there is 'an opportunity and need to extend RPL and to have it make a significant difference for employers and employees' (p.22). They recommended that training providers be encouraged to increase their provision of flexible learning options for mature-age apprentices, including offering more recognition of prior learning and more on-the-job training and shortened training requirements, as well as the provision of higher-level qualifications in trade programs and continuing professional development programs. They also appealed for training providers to model a consistent, predictable and effective approach to RPL (Mitchell, Dobbs & Ward 2010).

[6] It should be noted that even more recent efforts by some jurisdictions may still not yet be reflected in the available data.

[7] In 2012 Fair Work Australia was renamed the Fair Work Commission.

Impacts of RPL on the individual

RPL and skill set training approaches may be problematic for individuals who do not have the required literacy and numeracy skills, lack confidence or have health issues.

Despite the intent, known benefits and availability of RPL, a considerable amount of research has shown that recognition is not always an appropriate or the most suitable pathway for all individuals (Hargreaves 2006). Others decide that redoing the training is more suitable and 'easier':

> Some employer and apprentice participants had explained that they had enquired about RPL to recognise learning through prior experience in the industry or workplace, but had decided it was easier or more appropriate for training to be undertaken.
>
> (Dunn et al. 2011, p.160)

Some studies caution that RPL and skill set training approaches may be problematic for individuals who do not have the required literacy and numeracy skills, lack confidence or have health issues (Misko 2008; Smith, Smith & Selby Smith 2010). Karmel and Misko suggest this 'underscores the need to select the right candidates for accelerated programs as there have been instances where those in accelerated apprenticeships have had to drop out and return to the traditional programs' (Karmel & Misko 2009, p.17).

In their study on training mature-aged workers in the manufacturing industry, Smith, Smith and Selby Smith (2010) advise that 'mature-aged workers might find RPL, with its emphasis on assessment rather than learning, threatening as well as alien' (p.13). They go on to suggest that the preference for a qualifications-based national training system is not consistent with the preferences of mature-age workers (Smith, Smith & Selby Smith 2010), and as Westacott proposes:

> If we expect people to retrain over their working lives, we can't expect or afford [sic] them to leave the workforce to do it. But the necessary integration will involve an unprecedented level of cooperation between industry and providers. And it should include industry-auspiced validation of assessment. (Westacott 2014)

Impacts of RPL on the employer

Fine (2006), in her study for the Minerals Council of Australia, found that, while significant progress had been made by the minerals industry to provide innovative solutions to attract, train and retain apprentices, there remain structural barriers to increasing the uptake and completion of apprenticeships. Amongst a number of suggestions, she recommended that industry 'further embrace fast-track options and continued promotion of apprenticeships to existing workers to actively engage in RPL' (p.22). In addition, there was a recommendation for industry to liaise and work with federal and state governments to: explore strategies for making the delivery of training more flexible; support and enhance systems relating to RPL assessments; and review the nominal-term durations for apprenticeships (Fine 2006).

Despite the fact that employers value and were 'overwhelmingly positive' towards mature-age and existing worker apprentices, the Australian Council of Industry and Commerce study (Mitchell, Dobbs & Ward 2010) also highlights the inexperience of employers in supporting them. Employers could benefit from more guidance on how to integrate on-the-job learning with meaningful work and they would like more information on incentives, administrative requirements and available employer support. Further, some employers expressed criticism over the inconsistent approaches by training providers to RPL. As Mitchell, Dobbs and Ward (2010, p.43) explain:

With mature age and existing workers, recognition of prior learning is an important part of the process. Some employers note inconsistencies between providers — making it difficult to advise and support prospective applicants. A consistent, predictable and effective approach to RPL would shorten the time taken to complete an apprenticeship for many mature age and existing workers. The great benefit would be the achievement of a trade qualification wage in the shortest possible time.

How much RPL activity relates to older apprentices?

Data from the National VET Provider Collection quantify how much of the national RPL activity relates to adult apprentices. In 2013, there were just under 1.2 million subject enrolments in the publicly funded VET system reported with an RPL-granted subject outcome. A portion of this RPL activity relates specifically to trade apprentices aged 25 years and over who were undertaking their off-the-job training in the public VET system. This portion grew from 3.5% in 2009 to 7.0% in 2013 (see table 14).

While the proportions are comparable between the 24 years and under and 25 to 44 years age groups (4.7% and 5.2% in 2013 respectively), for those aged 45 years and over, the proportion is low (1.7% in 2013).

And when compared with other non-trade apprentices and trainees and other students with an RPL outcome aged 25 years and over, the portion of trade apprentices is 7.0% compared with 77.9%.

Table 14 Subject enrolments with an RPL-granted subject outcome by age and whether an apprentice[1], 2009–13 (%)

	2009	2010	2011	2012	2013
Apprentices[1] undertaking off-the-job training					
24 years and under	2.9	2.4	2.4	2.2	4.7
25 years to 44 years	2.8	2.6	3.1	3.2	5.2
45 years and over	0.7	0.7	0.9	1.0	1.7
Not known	0.0	0.0	0.0	0.0	0.0
Total	**6.4**	**5.6**	**6.4**	**6.5**	**11.7**
Not apprentices[2]					
24 years and under	14.1	14.8	14.8	13.8	10.3
25 years to 44 years	48.4	47.3	46.4	47.2	47.5
45 years and over	30.2	32.0	32.1	32.4	30.4
Not known	0.8	0.3	0.2	0.2	0.1
Total	**93.6**	**94.4**	**93.6**	**93.5**	**88.3**
Total students					
24 years and under	17.1	17.2	17.2	16.0	15.0
25 years to 44 years	51.2	49.9	49.5	50.4	52.8
45 years and over	30.9	32.6	33.1	33.4	32.1
Not known	0.8	0.3	0.2	0.2	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Notes: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

2 'Not apprentices' includes students not undertaking an apprenticeship or traineeship as well as non-trade apprentices and trainees.

Source: National VET Provider Collection, 2009–13.

Data from the National VET Provider Collection suggest that the number of course enrolments by apprentices with RPL activity is small, but the number is steadily increasing for all age groups (see table 15). The most significant difference in the number of course enrolments by apprentices utilising the RPL pathway occurred between 2012 and 2013 for those aged 24 years and under and those aged 25 to 44 years.

Table 15 Course enrolments by apprentices[1] undertaking off-the-job training with at least one RPL-granted subject outcome, 2009–13

	2009	2010	2011	2012	2013		2012–13
	Number	Number	Number	Number	Number	%	% change
24 years and under	3 919	3 997	4 625	5 333	7 595	47.9	42.4
25 years to 44 years	2 306	2 579	3 715	4 655	6 349	40.0	36.4
45 years and over	476	599	1 017	1 389	1 912	12.1	37.7
Total[2]	**6 703**	**7 176**	**9 357**	**11 379**	**15 857**	**100.0**	**39.4**

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

2 Age not known is not separately identified in the table but is included in the total.

Source: National VET Provider Collection, 2009–13.

State and territory differences

Further analyses on where this RPL activity is occurring by jurisdiction is provided in table 16. Over half of the older apprentices with an RPL pathway were in Queensland, while over half of the younger apprentices with an RPL pathway were in New South Wales. How this activity has changed over time is included in table F1 in appendix F.

Different administrative and funding policies for the recognition of prior learning may be responsible for the main differences in activity between jurisdictions; however, this would require further testing. It should also be noted that the higher numbers in New South Wales, Victoria and Queensland may be a reflection of the higher numbers of apprentices in their public VET systems, regardless of whether an RPL pathway was undertaken. Nevertheless, Queensland in particular has invested in its RPL processes and this appears to be reflected in the data.

Table 16 Course enrolments by apprentices[1] undertaking off-the-job training with at least one RPL-granted outcome by state or territory, 2013

	24 years and under		25 years to 44 years		45 years and over	
	Number	%	Number	%	Number	%
New South Wales	3 999	52.7	1 081	17.0	203	10.6
Victoria	666	8.8	778	12.3	382	20.0
Queensland	1 699	22.4	3 245	51.1	1 047	54.8
South Australia	299	3.9	191	3.0	47	2.5
Western Australia	319	4.2	598	9.4	159	8.3
Tasmania	253	3.3	239	3.8	56	2.9
Northern Territory	170	2.2	139	2.2	9	0.5
Australian Capital Territory	190	2.5	78	1.2	9	0.5
Total	**7 595**	**100.0**	**6 349**	**100.0**	**1 912**	**100.0**

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

Source: National VET Provider Collection, 2013.

Courses assigned to the other building and engineering technicians occupational area were the most common courses completed via the RPL pathway for apprentices aged 25 years and over.

How is RPL affecting qualifications completed?

Table 17 estimates the number of qualifications completed by apprentices for trades courses commenced in 2012 and completed in 2012 or 2013. The number of qualifications completed by apprentices is relatively low, at approximately 15 300 for those aged 24 years and below and 10 800 for those aged 25 years and over. This low number of completions may partly reflect the low national qualification completion rate of VET courses.[8] It may also reflect limitations in the data, as it is difficult to follow course commencements over more than one collection year without a unique student identifier; furthermore, the 2013 completions data were based on a preliminary estimate of qualifications completed. (The 2013 data will be revised upwards in the forthcoming 2014 collection.)

Putting aside the low number of course completions, of interest here is that almost 20% of these completed qualifications involved at least one subject in which RPL was granted for the older age groups. This compares with around 10% for those aged 24 years and below.

As might be expected, only a small proportion of the trades apprentices and trainees received RPL for all of their subjects (2.7% for those aged 25 to 44 years and 3.0% for those aged 45 years and over).

Table 17 Apprentices[1] who commenced a VET course in 2012 and either completed the course in 2012 or 2013 by age group and the proportion of subjects completed with an RPL-granted subject outcome

	24 years and under		25 to 44 years		45 years and over	
	Number	%	Number	%	Number	%
No RPL (0% RPL)	13 747	90.0	6 596	80.5	2 139	82.0
Part of the course was completed via RPL	1 375	9.0	1 377	16.8	394	15.1
All subjects within the course were completed via RPL (100% RPL)	160	1.0	225	2.7	77	3.0
Total	**15 282**	**100.0**	**8 198**	**100.0**	**2 610**	**100.0**

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

Source: National VET Provider Collection, 2012–13.

Coverage of occupational areas

The intended occupation is coded to all VET courses reported in the National VET Provider Collection. Table 18 provides the top five occupational areas assigned to courses for apprentices who completed a course with some RPL. Courses assigned to the other building and engineering technicians occupational area were the most common courses completed via the RPL pathway for apprentices aged 25 years and over. Refer to table G2 in appendix G for the number of completions by all course occupational areas.

[8] NCVER (2014b) estimates that the national completion rate for VET courses commenced in 2012 at certificate I and above was 35.6%.

Table 18 Top five occupational areas (ANZSCO, unit group level) of courses for apprentices[1] who commenced a VET course in 2012 and either completed the course in 2012 or 2013 via the RPL pathway[2] by age group

	24 years and under	25 to 44 years	45 years and over
1	3312 Carpenters and joiners*	3129 Other building and engineering technicians	3129 Other building and engineering technicians
2	3911 Hairdressers*	3110 Agricultural, medical and science technicians – nfd	3622 Gardeners**
3	3341 Plumbers*	3212 Motor mechanics*	3212 Motor mechanics*
4	3212 Motor mechanics*	3514 Cooks*	3110 Agricultural, medical and science technicians – nfd
5	3514 Cooks*	3622 Gardeners**	3514 Cooks*

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

2 'The RPL pathway' includes courses that were completed such that at least one subject had an outcome of RPL granted.

* Indicates that the occupational group includes occupations listed on the National Skills Needs List.

** Indicates that the occupational group includes occupations included in the National Skills Needs List as well as some occupations not included in the National Skills Needs List.

Source: National VET Provider Collection, 2012–13.

The survey data in table 19 examine, by the occupational area assigned to the training, the extent of RPL for graduates and module completers who undertook an apprenticeship. The occupational areas with the highest proportion of older graduates with relevant prior skills and experience include:

- engineering, ICT and science technicians (83.8% with prior skills and experience)
- automotive and engineering trades workers (79.6% with prior skills and experience)
- food trades workers (76.5% with prior skills and experience).

The percentage of graduates aged 25 years and over who actually had their training shortened drops to 48.3%, 49.2% and 49.2%, respectively, for these occupational areas.

Table 19 Recognition of prior experience and skills for graduates and module completers who undertook an apprenticeship[1] by age group and occupation (ANZSCO, sub-major group level) assigned to the course, 2011–13[2] (%)

	Graduates		Module completers	
	24 years and under	25 years and over	24 years and under	25 years and over
Engineering, ICT and science technicians				
With prior experience and skills related to training	*73.7*	*83.8*	*71.6*	*50.5**
Training shortened	34.8	48.3	np	15.9*
Training not shortened	38.9	35.5	27.3*	34.6*
No prior experience and skills related to training	*26.3*	*16.2*	*28.4**	*49.5**
Automotive and engineering trades workers				
With prior experience and skills related to training	*60.2*	*79.6*	*63.4*	*73.6*
Training shortened	26.9	49.2	27.9	41.2
Training not shortened	33.3	30.4	35.5	32.4
No prior experience and skills related to training	*39.8*	*20.4*	*36.6*	*26.4*

	Graduates		Module completers	
	24 years and under	25 years and over	24 years and under	25 years and over
Construction trades workers				
With prior experience and skills related to training	*55.3*	*64.3*	*49.9*	*66.6*
Training shortened	21.4	26.6	18.3	28.9
Training not shortened	33.9	37.7	31.6	37.6
No prior experience and skills related to training	*44.7*	*35.7*	*50.1*	*33.4*
Electrotechnology and telecommunications trades workers				
With prior experience and skills related to training	*42.1*	*56.4*	*35.6*	*57.4*
Training shortened	10.7	21.8	12.0*	22.7
Training not shortened	31.4	34.6	23.6	34.7
No prior experience and skills related to training	*57.9*	*43.6*	*64.4*	*42.6*
Food trades workers				
With prior experience and skills related to training	*62.0*	*76.5*	*57.7*	*73.6*
Training shortened	29.0	49.2	31.5	29.6
Training not shortened	33.1	27.2	26.2	44.1
No prior experience and skills related to training	*38.0*	*23.5*	*42.3*	*26.4*
Skilled animal and horticultural workers				
With prior experience and skills related to training	*66.8*	*68.3*	*53.5*	*81.6*
Training shortened	37.8	43.5	20.7*	46.3
Training not shortened	29.0	24.8	32.8	35.2
No prior experience and skills related to training	*33.2*	*31.7*	*46.5*	*18.4**
Other technicians and trades workers				
With prior experience and skills related to training	*56.2*	*74.5*	*56.0*	*68.7*
Training shortened	29.9	44.8	25.4	27.7*
Training not shortened	26.3	29.7	30.6	40.9*
No prior experience and skills related to training	*43.8*	*25.5*	*44.0*	*31.3**

Notes: 1 The intended occupation assigned to the training was used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

2 Data are combined for three survey years to maximise the number of survey respondents, as combining years will result in more reliable estimates.

* indicates that the estimate has a relative standard error greater than or equal to 25 percentage points and therefore should be used with caution.

Np indicates that the estimate is not provided because it is based on fewer than five survey respondents and is not reliable.

Source: Derived from the national Student Outcomes Survey.

Coverage of skill shortage areas

Apprentices undertaking the RPL pathway are enrolling in courses whose destination occupations are those identified in a national skills shortage area (see table 20 and more detailed occupational data and the National Skills Needs List in appendix G). Examples of these skill shortage occupations include the electricians occupational group (comprising general electricians, special class electricians and lift mechanics) and the binders, finishers and screen printers occupational group.

Table 20 Top five occupational areas (ANZSCO, unit group level) of course enrolments undertaken by apprentices[1] with at least one RPL-granted subject outcome by age group, 2013

	24 years and under	25 to 44 years	45 years and over
1	3312 Carpenters and joiners*	3129 Other building and engineering technicians	3129 Other building and engineering technicians
2	3411 Electricians*	3411 Electricians*	3921 Binders, finishers and screen printers*
3	3341 Plumbers*	3212 Motor mechanics*	3514 Cooks*
4	3911 Hairdressers*	3514 Cooks*	3230 Mechanical engineering trades workers – nfd
5	3212 Motor mechanics*	3230 Mechanical engineering trades workers – nfd	3923 Printers**

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

* Indicates that the occupational group includes occupations listed on the National Skills Needs List.

** Indicates that the occupational group includes occupations included in the National Skills Needs List as well as some occupations not included in the National Skills Needs List.

Source: National VET Provider Collection, 2013.

How much RPL is requested versus granted?

A finer level of detail on RPL assessments is available from the Student Outcomes Survey. Table 21 suggests that 69.7% of graduates aged 25 years and over who undertook an apprenticeship reported relevant prior skills and experience, but only 37.2% had their training shortened. A similar level of prior experience and RPL is reported by module completers in the equivalent age group.

The survey also suggests that 16.1% of apprenticeship graduates aged 25 years and over reported relevant prior skills and experience but did not have their training shortened because RPL assessment was not offered. Six per cent of apprentice graduates aged 25 years and over did not accept the offer to have their experience and skills assessed, reflecting our earlier comments about individuals choosing training over the RPL option.

Table 21 Recognition of prior experience and skills for graduates and module completers who undertook an apprenticeship[1] by age group, 2011–13[2] (%)

	Graduates		Module completers	
	24 years and under	25 years and over	24 years and under	25 years and over
With prior experience and skills related to the training	**56.4**	**69.7**	**54.8**	**67.9**
Training shortened	*24.0*	*37.2*	*23.9*	*31.5*
Based on prior study only	7.5	4.0	6.6	3.2*
Based on previous experience and skills only	5.4	11.9	4.7	10.2
Based on both prior study and previous experience and skills	11.1	21.4	12.7	18.2
Training not shortened	*32.4*	*32.5*	*30.9*	*36.4*
Training provider did not offer to assess prior experience and skills	16.5	16.1	14.8	16.8
Did not accept offer to have prior experience and skills assessed	6.6	6.0	7.4	5.5
Experience and skills assessed but training not shortened	9.3	10.4	8.6	14.1
No prior experience and skills related to the training	**43.6**	**30.3**	**45.2**	**32.1**
Training provider offered to assess prior experience and skills	28.4	18.1	30.9	21.4
Training provider did not offer to assess prior experience and skills	15.2	12.2	14.3	10.7

Notes: 1 The intended occupation assigned to the training was used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

2 Data are combined for three survey years to maximise the number of survey respondents, as combining years will result in more reliable estimates.

* The estimate has a relative standard error greater than or equal to 25 percentage points and therefore should be used with caution.

Source: Derived from the national Student Outcomes Survey.

Does RPL impact on reasons for undertaking training?

Table 22 provides the reasons for undertaking training for graduates and module completers who undertook an apprenticeship. Regardless of age and RPL activity, graduates and module completers most often reported reasons related to their current job, such as 'the training was a requirement of my job'. These statistics reflect the nature of the apprenticeship model, which combines work and training. The more detailed breakdown of these employment-related reasons in table 22 offers a more interesting story.

Graduates aged 25 years and over with RPL more often cited reasons related to gaining extra skills for their current job (28.6%), compared with graduates of the same age group who did not obtain RPL (17.4% for those with prior experience but no RPL and 7.5% for those with no prior experience). These differences were statistically significant. As expected, a higher proportion of graduates aged 25 years and over without any relevant prior experience cited reasons for undertaking training that were related to trying a different career, compared with graduates aged 25 years and over with relevant prior experience. Again, these differences were statistically significant.

Table 22 Main reason for undertaking training for graduates and module completers who undertook an apprenticeship[1] by age group and recognition of prior experience and skills, 2011–13[2] (%)

	Graduates		Module completers	
	24 years and under	25 years and over	24 years and under	25 years and over
Apprentices[1] with RPL[3]				
Employment-related	*93.9*	*93.0*	*90.7*	*94.2*
Get a job	21.3	9.6	19.6	10.3*
Develop an existing business	0.3*	2.5	0.0	5.7*
Start my own business	4.9	5.0	3.0*	5.0*
Try for a different career	3.7	10.4	1.6*	6.7*
Get a better job or promotion	2.8	11.6	3.8*	12.1
It was a requirement of my job	52.3	25.4	52.8	29.3
Gain extra skills for current job	8.5	28.6	9.8	25.1
Further study: to get into another course of study	*0.6**	*1.0**	*np*	*np*
Personal development	*5.5*	*5.9*	*7.3**	*5.7**
To improve my general education skills	4.4	3.9	1.5*	5.7*
To get skills for community/voluntary work	np	np	0.0	0.0
To increase my confidence/self-esteem	0.5*	1.3*	np	0.0
Other	0.7*	0.6*	np	0.0
Apprentices[1] with relevant prior experience but without RPL[3]				
Employment-related	*95.4*	*94.4*	*91.1*	*90.9*
Get a job	21.9	13.9	20.1	15.1
Develop an existing business	np	1.1*	np	np
Start my own business	7.2	7.0	3.6*	5.4*
Try for a different career	3.1	12.1	3.9*	11.6
Get a better job or promotion	1.3	10.7	3.8*	9.4
It was a requirement of my job	55.0	32.2	51.5	36.5
Gain extra skills for current job	7.0	17.4	8.2*	11.9
Further study: to get into another course of study	*0.5**	*np*	*np*	*np*
Personal development	*4.1*	*4.8*	*7.7*	*9.0**
To improve my general education skills	2.8	3.2*	6.4	3.9*
To get skills for community/voluntary work	np	np	0.0	0.0
To increase my confidence/self-esteem	0.3*	1.2*	0.0	np
Other	0.9*	np	1.2*	np
Apprentices[1] with no prior experience and skills relating to the training				
Employment-related	*96.5*	*96.8*	*96.6*	*96.3*
Get a job	27.3	18.5	31.3	22.6
Develop an existing business	np	np	np	0.0
Start my own business	6.5	7.8	2.1*	4.8*
Try for a different career	3.5	21.5	5.7*	20.3
Get a better job or promotion	2.0	6.0	0.8*	7.2*
It was a requirement of my job	52.1	35.4	52.3	29.7
Gain extra skills for current job	4.9	7.5	4.3*	11.7*
Further study: to get into another course of study	*0.8**	*np*	*np*	*0.0*

	Graduates		Module completers	
	24 years and under	25 years and over	24 years and under	25 years and over
Personal development	*2.8*	*2.8**	*3.1**	*3.7**
To improve my general education skills	2.0	2.3*	2.6*	3.4*
To get skills for community/voluntary work	np	np	np	0.0
To increase my confidence/self-esteem	0.4*	np	np	0.0
Other	0.4*	np	np	np

Notes: 1 The intended occupation assigned to the training was used to identify apprenticeships, based on ANZSCO group 3 (Technicians and trades workers).
2 Data are combined for three survey years to maximise the number of survey respondents, as combining years will result in more reliable estimates.
3 RPL is based on whether the training provider shortened training based on relevant skills and experience.
* indicates that the estimate has a relative standard error greater than or equal to 25 percentage points and therefore should be used with caution.
Np indicates that the estimate is not provided because it is based on fewer than five survey respondents and is not reliable.

Source: Derived from the national Student Outcomes Survey.

Demand versus places for accelerated apprenticeships: a case study of the National Apprenticeships Program

Statistics collected by East Coast Apprenticeships demonstrate that the demand for accelerated apprenticeships has been great, with limited places and a strict selection criteria resulting in demand outweighing places.

The National Apprenticeships program attracted 9812 applicants from 2011 to April 2014. Table 23 shows the second year of the program attracted the greatest number of applicants, noting that the 2014 data reflect only a four-month period, as the pilot program closed in April 2014. Since the program commenced in 2011, demand has been greatest in Queensland (66.3%), followed by Western Australia (9.9%) and New South Wales (8.9%).

Table 23 NAP applicants[1] by state or territory of applicant, 2011–14[2]

	2011[2]	2012	2013	2014[2]	% of total applicants
New South Wales	169	421	253	34	8.9
Victoria	118	301	232	30	6.9
Queensland	2 042	2 379	1 894	189	66.3
South Australia	64	175	75	14	3.3
Western Australia	164	617	156	30	9.9
Tasmania	19	282	51	3	3.6
Northern Territory	11	53	12	0	0.8
Australian Capital Territory	3	4	15	1	0.2
Total[3]	**2 590**	**4 232**	**2 688**	**301**	**100.0**

Notes: 1 'NAP applicants' refers to the number of online applications received for the NAP. Some, but not all, of these applicants proceeded to the 100-day selection process.
2 The 2011 and 2014 data are not comparable with data from other years as 2011 data were based on NAP participants from 17 March 2011, and 2014 data were based on NAP participants from 1 January 2014 to 30 April 2014. As a result, the 2011 and 2014 data are not based on full calendar years.
3 The total excludes one applicant from New Zealand.

Source: Derived from East Coast Apprenticeships NAP database.

The most popular trades for applicants over the past four years were electrical fitters/mechanics (22.9%), diesel fitters (20.5%) and boiler makers/welders (19.4%), although this varies by state and territory, as is shown in the more detailed tables in appendix H.

National Apprenticeships Program applicants have obtained their prior experience from a range of backgrounds. Table 24 shows that 28.8% of NAP applicants were existing trades assistants and a further 24.9% had an existing aligned trade. Around 9% were ex-defence force personnel.

Table 24 NAP applicants[1] by previous experience, 2011–14[2]

	2011[2]	2012	2013	2014[2]	% of total applicants
Existing aligned trade	287	1 195	878	87	24.9
Out of trade (completed part of an apprenticeship)	95	490	381	46	10.3
Defence force experience	106	442	275	34	8.7
Overseas qualification(s)	108	475	269	37	9.1
Existing trades assistant	429	1 494	811	88	28.8
Did not record background	1 566	136	74	9	18.2
Total	**2 591**	**4 232**	**2 688**	**301**	**100.0**

Notes: 1 'NAP applicants' refers to the number of online applications received for the NAP. Some, but not all, of these applicants proceeded to the 100-day selection process.

2 The 2011 and 2014 data are not comparable with data from other years as 2011 data were based on NAP participants from 17 March 2011, and 2014 data were based on NAP participants from 1 January 2014 to 30 April 2014. As a result, the 2011 and 2014 data are not based on full calendar years.

Source: Derived from East Coast Apprenticeships NAP database.

As Sparks, Ingram and Phillips (2009) outline, applicants must obtain RPL equivalent to at least 40% of the full qualification to pass the first selection stage. These applicants must then pass further selection tests and criteria, such as psychological testing, to be selected into the program. The duration of this selection process, which is 100 days, ensures there is a good match between applicants and the apprenticeship.

Data collected by East Coast Apprenticeships show that, from the 9812 applicants, around 1400 NAP applicants have completed the RPL process since 2011. As a result of failing to obtain the minimum RPL requirements or not passing the selection tests and criteria, the number of NAP participants drops from the 1440 who undertook RPL to 243 final participants (see table 25).

Table 25 Summary of NAP participants[1] by age group and year of application, 2011–14[2, 3]

	2011[2]	2012	2013	2014[2]
NAP participants[1] who completed RPL[4] but were not selected to participate in an accelerated apprenticeship[5]				
Did not achieve the required portion of RPL				
24 years and under	6	6	11	0
25 years and over	94	88	89	1
Total	**100**	**94**	**100**	**1**
Achieved the required portion of RPL but did not pass other selection processes or have not been included in selection process				
24 years and under	9	15	17	0
25 years and over	197	260	122	0
Total	**206**	**275**	**139**	**0**
NAP participants who completed the RPL[4] and were selected to participate in an accelerated apprenticeship[5]				
24 years and under	8	13	7	0
25 years and over	78	82	54	1
Total	**86**	**95**	**61**	**1**

Notes: 1 'NAP participants' refer to applicants who were selected to commence the 100-day selection process.

2 The 2011 and 2014 data are not comparable with data from other years as 2011 data were based on NAP participants from 17 March 2011, and 2014 data were based on NAP participants from 1 January 2014 to 30 April 2014. As a result, the 2011 and 2014 data are not based on full calendar years.

3 There were an additional 243 NAP participants who completed the RPL process and who were not included in the table because there was missing information on their age. The number of NAP participants who completed the RPL process increases to 1401 if these participants with age not known are included in the total figure.

4 'Participants who completed RPL' refers to those who completed the RPL process, which comprises 40 days of the 100-day selection process.

5 A minimum of 40% of trade requirements in a RPL assessment is required to proceed to the next stage of the NAP selection process. A small number of NAP participants were assessed as achieving 35% RPL but were selected to continue with the selection process based on the RTO's recommendation. The participants who achieved 35% RPL and later passed the other selection processes were identified in the table as those who completed RPL and were selected to undertake an accelerated apprenticeship.

Source: Derived from East Coast Apprenticeships NAP database.

Table 26 shows that nearly three-quarters (72.2%) of the final NAP participants aged 25 years and over applied for apprenticeships in the following trades:

- electrical fitter/mechanic
- diesel fitter
- boiler maker/welder.

Table 26 NAP participants who completed RPL and were selected to participate in an accelerated apprenticeship[1] by age and preferred apprenticeship trade, 2011–14[2]

	2011[2]	2012	2013	2014[2]	% of total participants 2011–14
24 years and under					
Boiler maker/welder	2	4	2	0	29.6
Carpenter/form worker	0	1	0	0	3.7
Diesel fitter	1	2	0	0	11.1
Dual trade instrumentation	0	0	1	0	3.7
Electrical fitter/mechanic	3	4	2	0	33.3
Mechanical fitter	0	2	3	0	18.5
Plumber	0	0	0	0	0.0
Total	**6**	**13**	**8**	**0**	**100.0**
25 years and over					
Boiler maker/welder	17	16	12	0	20.8
Carpenter/form worker	9	4	1	1	6.9
Diesel fitter	24	24	1	0	22.7
Dual trade instrumentation	0	4	1	0	2.3
Electrical fitter/mechanic	18	21	23	0	28.7
Mechanical fitter	10	14	11	0	16.2
Plumber	0	0	5	0	2.3
Total	**78**	**83**	**54**	**1**	**100.0**

Notes: 1 This includes NAP participants who obtained the required portion of RPL, passed the 100-day selection process and who commenced an apprenticeship contract through NAP.

2 The table includes NAP participants from commencement of the pilot program in 2011 to completion of the pilot program on 30 April 2014.

Source: Derived from East Coast Apprenticeships NAP database.

Information was collected on the extent of RPL obtained by the final NAP participants. Table 27 indicates that 26.0% of the final NAP participants aged 25 years and over obtained RPL equivalent to 50% or more of their training.

Table 27 NAP participants who completed the RPL component and were selected to participate in an accelerated apprenticeship[1] by age and percentage of RPL granted, 2011–14[2]

Percentage of RPL granted	24 years and under		25 years and over	
	Number	%	Number	%
35–39%	0	0.0	21	9.8
40–44%	20	71.4	102	47.4
45–49%	2	7.1	36	16.7
50–59%	3	10.7	27	12.6
60–69%	1	3.6	16	7.4
70–79%	2	7.1	9	4.2
More than 80 and less than 100	0	0.0	4	1.9
Total	**28**	**100.0**	**215**	**100.0**

Notes: 1 This includes NAP participants who obtained the required portion of RPL, passed the 100-day selection process and who commenced an apprenticeship contract through NAP.

2 The table includes NAP participants from commencement of the pilot program in 2011 to completion of the pilot program on 30 April 2014.

Source: Derived from East Coast Apprenticeships NAP database.

Since 2009 there has been a rapid increase in the number of skill sets in training packages, suggesting strong industry support for them as a vehicle for meeting changing workforce skill development needs.

Skill sets in the VET system

> The VET system in Australia uses units of competency as its basic building blocks. Each unit of competency has defined learning outcomes (knowledge, skills and their application parameters), which are measurable in their own right, but which also contribute to larger education outcomes. When units of competency are combined into an interrelated set below the level of a full qualification, they are now commonly referred to as 'skill sets'. Skill sets enable performance of job tasks or functions. By comparison, whole qualifications produce learning outcomes that enable performance of a whole VET occupation. (Mills et al. 2012, p.10)

Two types of skill sets currently exist: skill sets in training packages and skill sets developed by registered training organisations (see Box 1). Since 2009 there has been a rapid increase in the number of skill sets in training packages (see table 28), suggesting strong industry support for them as a vehicle for meeting changing workforce skill development needs (Misko 2010; Mills et al. 2012). As at June 2014, the total number of skill sets in training packages had increased further, to 1125.

Box 1: What are skill sets?

The Australian VET system began to use units of competency as its basic building blocks in the late 1980s, and these were incorporated into the design of a national VET system, over and above the state-based systems, in the early 1990s. The way the national VET system was created has led to the current situation of two types of skill sets being distinguished in VET. These two types of skill sets differ in their composition. Skill sets developed by registered training organisations have been highly flexible constructs, containing any units from any qualification within training packages or other nationally or state-accredited qualifications, whose aim is to meet the skills development needs of an individual, enterprise or industry client. Training package skill sets on the other hand are prescribed and made up of units originating only from training package qualifications. The two types of skill sets differ in their development process. Registered training organisation skill sets are developed through negotiations with their clients at any time and with minimum administrative delay, while their counterparts from training packages are developed through the training package continuous-improvement process, which has longer lead times. In relation to reporting and recording, there has long been a recognition and certification tool for skill sets in VET — the statement of attainment. Some registered training organisations have coded and reported their training in skill sets as enrolments and completions in statements of attainment, in accordance with long-term VET policy. The recommendation of the High Level Review of Training Packages was that skill sets in training packages also be recognised through a statement of attainment. However, it has been decided that skill sets in training packages will be coded for national reporting as part of the forward plan for the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) in a few years time (see Box 2) (Mills et al. 2012).

Table 28 Number of skill sets developed across all training packages, 2006–12

Date	2006	September 2009	August 2010	June 2012	June 2014
Number of training package skill sets	Assume zero, no definitive data found	178	323	924	1125

Source: Misko (2010); <https://training.gov.au/>.

The main reasons for undertaking skill set training developed by registered training organisations include compliance and licensing, upgrading skills and gaining specific knowledge of an emerging area (Misko 2010; Mills et al. 2012).

There continues to be an industrial relations debate among some industry sectors about whether skill sets are appropriate for entry-level training, especially for the trades. However, there seem to be no issues about using skill sets for upskilling for those who have completed their apprenticeships (Misko 2010).

A concern with skill sets in training packages for entry-level training is that they are perceived to promote a 'fragmentary approach' to skill development and may reduce the portability of recognised skills (Misko 2010). However, Mills et al. (2012) in their case study of skill set training in TAFE NSW for the agrifoods industry find that skill sets aided engagement in vocational education and were used as a stepping stone to the completion of full qualifications. They were also used to build additional skills, particularly those that broaden and/or deepen the skills and capabilities of already qualified workers. In addition, they suggest there is a need for flexibility in the structure of skill sets, noting that there is a wide range of individual skill development needs in any cohort of learners (Mills et al. 2012).

Mills et al.'s case study also shows the diversity of participation in skill sets across the age spectrum, with over 50% aged over 25 years. In 2005, of the 1098 students who completed the Statement of Attainment in Rural Production Studies, 21% were aged 25 years and under; 18% aged 26—35 years; 23% aged 36—45 years; 21% aged 46—55 years and 17% over 55 years (Mills et al. 2012). However, those from the older age brackets were less likely, compared with the 25 years and under age, to go on and engage in further training.

The benefits of skill set training, as identified by participants in the Mills et al. (2012) study, include the small time commitment required; the ability to manage other work commitments and limit loss of income; the ability to focus on specific, relevant and practical skills; the relatively low cost of the training; and the ability to undertake training locally or even on site (Mills et al. 2012). In addition, skill set training was assessed in terms of its impact on employment opportunities, workplace tasks and workplace productivity. Participants generally supported the idea that skill set training improved employment opportunities and there was strong support for the positive impact of skill sets on productivity. The small group of employers amongst the students interviewed were overwhelmingly supportive of the value of the skill set training to their operations (Mills et al. 2012).

Several industry skills councils have defended the idea of skill sets and the benefits they provide for upskilling their workforce and have been critical of funding models not fully embracing delivery using skill sets (see, for example, Agrifoods and Skills DMC). They recognise that industry needs to work with registered training organisations to provide shorter training programs, programs that specifically address workers' gaps in knowledge and recognise prior existing skills and experience. A manufacturing workforce study also found that short courses or skill sets are the preferred option as this form of training can be

A plethora of evidence shows that training for the adult learner is best delivered in modules, with experienced workers preferring context-related and incremental training options.

highly customised and efficiently upskill existing staff in new technologies (Australian Workplace Productivity Agency 2014).

With respect to the significance of skill set training for the adult apprentice, a plethora of evidence shows that training for the adult learner is best delivered in modules, with experienced workers preferring context-related and incremental training options. As the United Kingdom Commission for Employment and Skills (2012, p.22) suggests:

> This is not only because adults have relatively high opportunity costs of training often combined with concurrently higher financial and family commitments (and thus mainly participate in short courses). It is also because the learning needs and learning proclivities of adults are different from young people who have just entered the labour market.

Other studies point to the importance of 'bite-sized' training to support people entering new occupations or to meet the challenges posed by structural change and the demands of the economy (United Kingdom Commission for Employment and Skills 2012). As the UK study suggests, there is a 'danger of [the Australian system] being too short-sighted' because, despite its flexible nature it does not provide for broad-based generic or employability skills.

Leary (2009) suggests that 'flexible gap training options are critical for candidates' RPL progression'. This means that post-RPL gap training options must include those for less than a full unit of competency. The other issue in relation to gap training is 'perhaps not so much about resource availability but the capacity or otherwise of assessors to confidently provide suitable options for those with identified competency gaps' (Leary 2009, p.10). As Leary further notes (2009, p.13):

> Candidates should not have to wait for training in an RTO-convenient schedule. In addition, because RPL often identifies gaps at element level (such as legislation knowledge), competency development for less than a full unit is often required. Flexible training options can meet this need …

Box 2: Recording and reporting skill set data

In 2007, the National Quality Council (NQC) determined that skill sets would complement full qualifications in the Australian Qualifications Framework and be included in training packages. Training package skill sets provide formal recognition of training for a discrete part of a qualification; the training is linked to a function or role within an occupation. The National Quality Council defines skill sets as 'those single units or combinations of units which link to a licence or regulatory requirement, or defined industry need'.

In September 2011, the Standing Council on Tertiary Education, Skills and Employment (SCOTESE) assigned the Data and Performance Measurement Principal Committee with the task of 'establishing policies and systems for improving the measurement of completions and counting of completed skill sets'. The following steps have been completed to date:

- The release 7.0 of AVETMISS, which came into effect in January 2014, has been expanded to have the capacity to capture skill set activity.
- The National Training Register has added an AVETMISS-compliant skill set identifier to the skill set register.

While skill sets are not qualifications, they share a number of attributes with qualifications, including being part of training packages and being tied to funding arrangements at AQF level in some Commonwealth/state agreements. If information about skill sets is collected, they could be reported from 2014 publicly funded training activity in 2015. However, there is yet to be agreement on how they should be classified.

Any return on investment calculations for a mature-age or existing worker are more complex than for a school leaver.

Estimating outcomes and benefits from shortened apprenticeships

What the literature tells us

A considerable amount of literature exists on the benefits and outcomes of completing a qualification, or an apprenticeship in particular. Very little Australian return on investment research has been undertaken specifically in relation to the older adult apprentice, although some interesting international studies are available. These have been included here to provide some general insights: direct comparisons between Australian and international training and apprenticeship systems are not possible, although the age of apprentices is roughly similar between England and Australia, with around 40% aged 25 years and over. Some of these studies refer to the broader apprenticeship system, not only to trade apprentices.

Cost-benefit analysis studies take into account work expectancy — the average number of years that learners are expected to remain in the workforce after completing their training. With the average age of apprentices increasing, this leads to a fall in work expectancy, 'therefore the benefits accruing to apprentices during their working lifetime also drop' (United Kingdom National Audit Office 2012b). Thus any return on investment calculations for a mature-age or existing worker are more complex than for a school leaver, primarily because young learners experience significantly better returns than older learners. An important trade-off arises between the long-term pay-off periods for training investment and the long-term job tenure for both the employer and the adult apprentice. Human resource investments are more profitable the longer the investments can be used (United Kingdom Commission for Employment and Skills 2012).

Some evidence suggests varying financial returns between different types of apprenticeships across industry sectors, which is examined in detail here. One finding is that the premium attached to becoming a qualified tradesperson is significant, but is not always enough to offset the opportunity cost of undertaking training, particularly for adult apprentices (Bednarz 2014).

Finally, it should be noted that estimates of economic returns in general do not include an assessment of 'additionally' — the extent to which public funding results in training that would not have taken place in its absence.

In summary, there is a gap in the literature specifically examining the return on investment for either an employer or an individual adult apprentice completing their qualification via a non-traditional pathway. It should be recognised that any study of this nature would be difficult because the 'extent to which RPL absorbs the cost of prior studies that are pathways towards the highest qualification is difficult to estimate' (Long & Shah 2008). There is a need to take into account the wider impact of participation via alternative apprenticeship pathways, not merely the economic benefits to the individual, employer or government.

Australian studies

Males who undertake further education and training after the age of 25 years did so for reasons related to their current employment.

Employers in the Australian Chamber of Commerce and Industry study remarked that 'mature age apprentices are able to see the long-term benefit of having up-to-date skills and the associated increase in job and career security' (Mitchell, Dobbs & Ward 2010, p.70).

Fok and Tseng (2009) show positive returns from apprenticeship participation in both weekly earnings and employment. While there are some costs associated with training and being paid lower initial wages, apprentice earnings 'catch up very quickly' (Fok & Tseng 2009, p.4).

A study undertaken by Coelli, Tabasso and Zakirova (2012) sought to address the question of what motivates people aged in their mid-20s and beyond to undertake education and training and to identify the impact and benefits of doing so. They found that males who undertake further education and training after the age of 25 years did so for reasons related to their current employment, for example, towards a promotion or a different job. For females the motivator was simply getting a job. For both males and females a sustained increase in job satisfaction following completion of the study was also found.

In terms of the return on investment for the employer, the results of an Australian Chamber of Commerce and Industry survey of 170 Australian employers indicate that they 'believe the return on investment in a mature age apprentice is higher than in a youth apprentice' (Mitchell, Dobbs & Ward 2010, p.27). In addition, an independent evaluation of the National Apprenticeships Program identified substantial benefits where RPL is used with adults, including increased organisational capability and immediate productivity gains for the employer, as well as increased earning capacity for participants (Pricewaterhouse Coopers 2013).

Bednarz (2014) cites the work of Nechvoglod, Karmel and Saunders (2009), who considered the opportunity cost associated with undertaking an apprenticeship. Their approach was to determine the pay-back period, based on the premium a skilled tradesperson earns relative to an unskilled worker in the same occupation. They found that for some trades there will be a pay-back within one or two years, but for others, the pay-back will not be realised until 20 years down the track. For adult apprentices, the pay-back period can be over 50 years. Of the three trades investigated (electrical, plumbing and refrigeration), the authors found that the electrical trades had the shortest pay-back period — roughly two years for a youth apprentice and roughly five years for an adult apprentice. By contrast, refrigeration and plumbing had pay-back periods of approximately 20 years for youth apprentices and in excess of 50 years for adult apprentices. The length of the pay-back period is strongly influenced by the wage of a qualified tradesperson in the occupation and how this compares with wages in alternative employment. Although this work was based on a limited range of occupations and involved only six case studies, it highlights that the time taken to realise the monetary rewards of undertaking an apprenticeship can be substantial (Bednarz 2014).

International studies

The United Kingdom National Audit Office (2012b) concludes that apprenticeships for adults offer a good return for the public money spent on them overall. Their study assesses the value for money of the UK Apprenticeship Programme, focusing primarily on adults (aged 19 plus). The numbers in this age group have been significantly expanded in recent years, partly as a result of the restrictions limiting public funding to those under 25 years being removed, as has been the case in Australia. By analysing data on the wages received between 2004 and 2010 by employees who had completed their apprenticeship, they find

that these employees achieved higher wages than similar employees who had not completed an apprenticeship. In particular, completing an advanced apprenticeship was associated with wages that were 18% higher and for an intermediate apprenticeship 11% higher (United Kingdom National Audit Office 2012b). In terms of spending on adult apprenticeships, this totalled £451 million in 2010—11. The National Audit Office estimated that advanced and intermediate apprenticeships for adults produce economic returns at £21 and £16 respectively for every £1 of public funding. These figures assume all the training would not have occurred without public support, which is optimistic (United Kingdom National Audit Office 2012b).

In another study the National Audit Office estimated the economic benefits from apprenticeships using seven years of the United Kingdom's Labour Force Survey 2004—10 (United Kingdom National Audit Office 2012a). They found significant positive wage premiums associated with apprenticeships, with individuals benefiting from the greater likelihood of being employed. Recognising the methodological challenges of their exercise, they used econometric modelling to examine whether the completion of an apprenticeship tended to result in employees earning higher wages than other employees with similar characteristics who did not complete an apprenticeship. They note that the results should be interpreted as statistical association rather than the causal impact of apprenticeships on individual wages or employment outcomes. In addition, because apprentices are often already in employment when they begin their training, the employment premiums are likely to be overestimated (United Kingdom National Audit Office 2012a).

Of particular interest however is that they examined whether the age when an individual completed the apprenticeship had any effect on the wage premium; they found no evidence that wage premiums differ significantly according the age when an individual completes the apprenticeship. However, it should be noted that the sample size for apprentices in the age group of 25 years and over was small (United Kingdom National Audit Office 2012a). They do also note that, given apprentices are now on average older, their work expectancy decreases and the benefits accruing to them during their working life also falls (United Kingdom National Audit Office 2012a).

A study from the Department for Business, Innovation and Skills (2012) in the United Kingdom investigated the prior qualification levels of adults undertaking apprenticeships in 2010—11. The research was conducted to understand the background of those deciding to undertake an apprenticeship as an adult and the extent to which investment in apprenticeships has been directed towards upskilling individuals with lower skill levels. The research sought to provide insight into the profile of adult apprentices in terms of demographics, employment status and income, and to uncover motivations for engaging in apprenticeships. The main findings of interest in an Australian context indicate:

- The relatively high number of adult apprentices who already held a qualification at a similar or higher level or who had previously attained an apprenticeship: more than three-quarters of adults aged 19 years and older studying for their full level 2 qualification already had a full level 2 qualification or higher before enrolling in their apprenticeship.
- Those without prior qualifications were on average older than those who had attained the level previously or who were repeat learners.

- The key motivations for undertaking training were the same across both first and non-first level 2 and level 3 learners; namely, to gain certification or a qualification and for the purposes of career development and the development of new knowledge and skills (United Kingdom Department for Business, Innovation and Skills 2012).

A 2011 study by the United Kingdom Department for Business, Innovation and Skills considered the importance of age in determining learning outcomes and how changes in earning and employment levels differ by age.

In a study for the Department for Business, Innovation and Skills, Higton et al. (2013) evaluated over 5000 apprenticeship learners in the United Kingdom. They found that apprentices under what they call a 'newer framework' reported a wide number of benefits such as perceived impact, pay rises and promotions. These frameworks involve shorter time spent on training and shorter average time to complete training, and were broadly comparable with an RPL and skill set approach to gap training in the Australian context. However, 'pay rises were more commonly reported by younger apprentices (73% aged 16—18) compared with 29% aged 25 or over' (Higton et al. 2013, p.71).

On the other hand, as would be expected of an adult entering the apprentice route via an existing job, adult wage levels are already higher (United Kingdom Learning and Skills Council 2009).

A 2011 study by the United Kingdom Department for Business, Innovation and Skills considered the importance of age in determining learning outcomes and how changes in earning and employment levels differ by age. Their focus was on cohorts of learners who were aged 19 years or younger, 20 to 24 years and 25 years or older. They show that outcomes after learning tend to be greatest for the 16 to 19 years age group and smallest for the 25 years and over age group for both men and women.

The United Kingdom Commission for Employment and Skills (2012) study found strong incentives for apprentices who participated in intermediate-level training but only partial incentives for employers. For the individual the primary incentives related to their potential for earning higher wages and experiencing lower unemployment risks. The authors conclude that, for employers, apprenticeship training did not always provide the ideal solution:

> In spite of the fact that apprenticeship training is an efficient instrument for meeting future skills needs, and training costs are low if the productive value of apprentices' work is considered, only a minority of employers engage in apprenticeship training (p.x).
>
> [Yet] all of the evidence suggests that intermediate level skills training delivers higher economic returns when it is delivered through the apprenticeship system. Cost is often an issue for the employer in this respect. But much of the evidence suggests that high quality training can be delivered such that the costs can be recouped over the training period. This can be achieved by ensuring that apprentices' productive contributions are limited to undertaking skilled work (p.55).

Importantly, this study points out that 'intermediate vocational training is a long-term investment which requires a relatively long pay-off period over a sustained period of stability in the system. It should not be left to the markets exclusively' (United Kingdom Commission for Employment and Skills 2012, p.xii).

What the data tell us

In this section we analyse data from the Student Outcomes Survey to compare outcomes for the following groups of apprentices:

- apprentices with relevant prior experience who had their training shortened (referred to as apprentices with RPL)
- apprentices with relevant prior experience who did not have their training shortened
- apprentices with no prior experience related to the training.

How do adults entering a trade via a shortened pathway compare with other adult apprentices?

Employment outcomes

It is not surprising that employment outcomes are typically good following the completion of an apprenticeship (see previous research on this topic, for example, Karmel & Liu 2011). Over 90% of apprentice graduates aged 25 years and over are employed after training (table 29).

Employment outcomes are relatively similar for apprentice graduates aged 25 years and over, regardless of RPL activity and prior experience, with one exception — employment at a higher skill level after training. The proportion of apprentice graduates reporting employment at a higher skill level after training is significantly lower for apprentice graduates with RPL (20.8%) compared with apprentice graduates with experience but no RPL (37.4%) and those with no relevant prior experience or skills (46.0%). It is not clear why this variation occurs but it may be as a result of individuals simply needing to gain skills for their current job or as a result of occupational or industry mobility at the same level.

Table 29 Selected outcomes for graduates who undertook an apprenticeship[1] by age group and recognition of prior experience and skills, 2011–13[2] (%)

	24 years and under	25 years and over
Apprentices[1] with RPL[3]		
Employed after training	92.3	94.0
Employed or in further study after training	93.8	94.7
Enrolled in further study after training	20.7	19.0
Of those employed after training		
Found the training relevant to their job	93.3	94.1
Received at least one job-related benefit	94.1	93.0
Of those employed before training		
Employed at a higher skill level after training	33.1	20.8
Improved employment status after training[4]	88.8	88.1
Apprentices[1] with relevant prior experience but without RPL[3]		
Employed after training	93.8	93.6
Employed or in further study after training	95.4	94.6
Enrolled in further study after training	20.2	23.8
Of those employed after training		
Found the training relevant to their job	92.9	94.3
Received at least one job-related benefit	93.6	92.0
Of those employed before training		
Employed at a higher skill level after training	34.1	37.4
Improved employment status after training[4]	90.4	87.8
Apprentices[1] with no prior experience and skills related to the training		
Employed after training	92.7	92.4
Employed or in further study after training	94.3	94.4
Enrolled in further study after training	19.7	23.1

	24 years and under	25 years and over
Of those employed after training		
Found the training relevant to their job	93.6	95.3
Received at least one job-related benefit	94.2	94.5
Of those employed before training		
Employed at a higher skill level after training	44.1	46.0
Improved employment status after training[4]	89.5	89.4

Notes: 1 The intended occupation assigned to the training was used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).
2 Data are combined for three survey years to maximise the number of survey respondents, as combining years will result in more reliable estimates.
3 RPL is based on whether the training provider shortened training based on relevant skills and experience.
4 'Improved employment status after training' is employment status changing from not employed before training to employed after training OR employed at a higher skill level after training OR received a job-related benefit. An individual may have reported a positive response to more than one measure contributing to improved employment status after training.

Source: Derived from the national Student Outcomes Survey.

As expected, most graduates who had undertaken an apprenticeship were later employed in the same occupation as their training. As table 30 shows, a statistically significant higher percentage of adult apprentices aged 25 years and over who obtained RPL were employed in a different but related occupation (19.8%), compared with those with prior experience but without RPL (14.0%).

Table 30 Occupational destination and training relevance for graduates who undertook an apprenticeship[1] by age group and recognition of prior experience and skills, 2011–13[2] (%)

	Employed				Total employed	Not employed	Total
	In same occupation (as training course)	In different occupation (from training course) – training was relevant to current job	In different occupation (from training course) – training was not relevant to current job	Occupation after training not known			
Apprentices[1] with RPL[3]	**73.6**	**13.3**	**4.0**	**2.0**	**93.0**	**7.0**	**100.0**
24 years and under	77.4	9.2	4.1	1.6	92.3	7.7	100.0
25 years and over	67.6	19.8	4.0	2.5	94.0	6.0	100.0
Apprentices[1] with relevant prior experience but without RPL[3]	**77.0**	**10.6**	**3.6**	**2.5**	**93.8**	**6.2**	**100.0**
24 years and under	78.2	9.2	4.0	2.4	93.8	6.2	100.0
25 years and over	74.1	14.0	2.8*	2.7	93.6	6.4	100.0
Apprentices[1] with no prior experience and skills related to the training	**77.3**	**10.1**	**3.7**	**1.5**	**92.6**	**7.4**	**100.0**
24 years and under	78.6	8.8	3.9	1.4	92.7	7.3	100.0
25 years and over	72.6	15.0	3.0	1.7*	92.4	7.6	100.0

Notes: 1 The intended occupation assigned to the training was used to identify apprenticeships, based on ANZSCO group 3 (Technicians and trades workers).
2 Data are combined for three survey years to maximise the number of survey respondents, as combining years will result in more reliable estimates.
3 RPL is based on whether the training provider shortened training based on relevant skills and experience.
* indicates that the estimate has a relative standard error greater than or equal to 25 percentage points and therefore should be used with caution.

Source: Derived from the national Student Outcomes Survey.

Wages

There are some slight differences in wage outcomes six months after training between the three groups of graduates aged 25 years and over. Adult apprentices with relevant prior experiences reported slightly higher wages after training on average (around $60 000) compared with adult apprentices without relevant prior experience ($55 600). Of those with relevant prior experience, there was only a slight difference in the average annual wage for those who obtained RPL ($60 000) compared with those who did not ($59 200).

A more detailed analysis of the Student Outcomes Survey data is required to determine whether there are any statistically significant differences in the employment outcomes and wages we have identified between the three groups. If significant differences exist, statistical modelling is recommended to determine whether there are other interacting factors to explain the differences, such as prior qualifications. This was beyond the scope of this project.

Table 31 Average annual income after training for full-time employed graduates who undertook an apprenticeship[1] by age group and recognition of prior experience and skills, 2011–13[2] ($)

	24 years and under	25 years and over
Apprentices[1] with RPL[3]	45 800	60 000
Apprentices[1] with prior experience but without RPL[3]	46 000	59 200
Apprentices[1] with no prior experience and skills related to the training	45 100	55 600

Notes: 1 The intended occupation assigned to the training was used to identify apprenticeships, based on ANZSCO group 3 (Technicians and trades workers).
2 Data are combined for three survey years to maximise the number of survey respondents, as combining years will result in more reliable estimates.
3 RPL is based on whether the training provider shortened training based on relevant skills and experience.

Source: Derived from the national Student Outcomes Survey.

Overall, the employment and wage outcomes for adult apprentices on a shortened pathway are comparable with other adult apprentices. Variations in relation to employment at a higher skill level may reflect the reason for undertaking the training, as we know that older apprentices with RPL more often cite reasons related to gaining extra skills for their current job (table 22). RPL may however play a role in occupational mobility at the same skill level. These findings also suggest that prior experience itself may have a slightly greater impact on wages following training than the type of pathway (RPL) undertaken.

Outcomes from accelerated apprenticeships: a case study of the National Apprenticeships Program

Around 90% of NAP participants aged 25 years and over who completed the program were employed two months after completion of their training. The majority (72.3%) were employed with the same employer and a further 9.2% were employed with a different employer but within the same industry.

Table 32 NAP program completers 2011–14[1] by age group and employment outcomes (approximately two months after program completion)

	24 years and under		25 years and over	
	Number	%	Number	%
Employed				
Employed with same employer	2	66.7	47	72.3
Employed with a different employer but within the same industry	0	0.0	6	9.2
Employed with a different employer and within a different industry	1	33.3	6	9.2
Not employed				
Unemployed and looking for work	0	0.0	0	0.0
Not in the labour force	0	0.0	0	0.0
Not known	0	0.0	6	9.2
Total[2]	**3**	**100.0**	**65**	**100.0**

Notes: 1 The table includes NAP completers as at 30 April 2014.
2 An additional 161 NAP participants were still in progress at the time of the analysis.

Source: Derived from East Coast Apprenticeships NAP database.

Australia is one of only a few countries offering government incentives and subsidies to employers of apprentices and trainees to offset wage costs.

Impacts of incentives and wages to support adult apprentices

Australian and state/territory governments have a commitment to providing publicly funded support for apprenticeships and traineeships. Indeed, Australia is one of only a few countries offering government incentives and subsidies to employers of apprentices and trainees to offset wage costs (Knight 2011; OECD 2009). Of particular interest to this study is the number of incentives and initiatives available to support adult as well as mid-career apprentices. Knight (2011) notes that the impact of payments and incentives depends in large measure on the personal circumstances of the apprentice. He goes on to suggest 'the only Australian Apprenticeship incentives payment likely to be of much significance is that paid to a mid-career apprentice' (Knight 2011, p.60). On incentives, Mitchell, Dobbs and Ward (2010, p.20) note:

> Incentive payments can make a difference to the employer and the employee. The Commonwealth's 'Support for Mid-Career Apprentices' program can subsidise wages by up to $13 000 over the first two years of the apprenticeship.

Commonwealth

The main incentives available for an adult apprentice are (Australian Government 2014):
For *employers*:

- Mature Aged Worker incentives scheme for certain apprentices and trainees aged 45 years or older (all levels) who face particular barriers to employment and training, which provides $750 on commencement and $750 on completion
- Support for Adult Australian Apprentices (eligibility is 25 years) in National Skill Needs List occupations: $4000 available at certificate III/IV level only if the employer pays at or over the national minimum wage.

The recipient of the incentive is determined based on the actual wage paid to the apprentice. However, from 1 July 2015 the apprentice payments ceased.[9]

A recommencement incentive of $750 is available for employers employing an 'out of trade' (that is, unemployed and returning to the trade) apprentice or trainee apprentice in certificate III, IV or selected diploma and advanced diploma qualifications.

A range of additional incentives exist that may also benefit an adult apprentice, including Living Away From Home Allowances and, more recently, Trade Support Loans, replacing the Tools for your Trade program (Australian Government 2014). Employers of apprentices on the National Skills Needs List may also be eligible for other incentives in addition to those listed here.

An important point is that the National Skills Needs List (included in appendix G), which identifies trades that are deemed to be in national skill shortage, is used to determine eligibility for many of the incentives and personal benefits available under the Australian

[9] See Australian Apprenticeships website: <http://www.australianapprenticeships.gov.au/programme/support-adult-australian-apprentices-initiative>.

Apprenticeships Incentives Program. This may preclude some individuals, depending on the industry area, from accessing additional support.

It would appear there are very few state/territory incentives specifically targeting adults over 25 years.

State/territory

State and territory governments have a range of incentives for apprentices and trainees or their employers. Except in Queensland (which has a more extensive range than any other state/territory), the value of these incentives is relatively modest by comparison with the payments made by the Australian Government (Knight 2011). They range from cash payments for apprentices commencing in skill shortage occupations, to accommodation and travel allowances, rebates for books, clothing and tools and training fee caps. The benefits of payments and concessions from the state government will be greatest for apprentices who are on low wages or struggling to meet living costs (Knight 2011).

Some states also have a range of incentives and payments for employers, such as additional targeted commencement and completion incentives, rebates on payroll tax for wages paid to apprentices, as well as access to the Building and Construction Industry Training Fund in the six states where this operates.

Based on Knight's (2011) analysis, it would appear there are very few state/territory incentives specifically targeting adults over 25 years. One example identified is from Western Australia, where there are bonus incentives from the Building and Construction Industry Training Fund for employing a mature-age person (30 years or older) as an apprentice in specified building trades. Conversely, other incentives, such as the bonus payments to apprentices upon completion, specifically target those under 25 years.

There are other incentives that encourage early completion, such as the $1000 early completion payment for eligible apprentices in skill shortage occupations (available from 1 January 2007) in Queensland.

As Knight (2011) notes, it is difficult to identify the full range of available state/territory incentives and to assess their impact, as they are often introduced at different times and the contracts to which they apply often cannot be identified in the national database of Australian Apprenticeships.

Modern awards and adult apprentice wages

There are inevitable links between adult apprentices, arrangements for competency-based progression and wage setting. While it is beyond the scope of this paper to explore the issues in any depth, it is important to note emerging findings and remaining gaps in this area.

While wages can be a factor in apprenticeship completion rates, they are not the deciding one, and the research into decisions to continue with an apprenticeship or not based on wage is not consistent (Karmel & Mlotkowski 2010; Bednarz 2014). Nevertheless, 'the ability of apprentices to advance to a higher wage level constitutes a significant incentive to achieve competencies at a faster rate' (Oliver 2011, p.48). Employers in the Australian Chamber of Commerce and Industry study also suggest any reluctance on the part of mature-age or existing workers to take up apprenticeships is largely related to the low apprentice wage (Mitchell, Dobbs & Ward 2010). At the same time some employers do not always support earlier completion because of the prospect of having to pay higher wages sooner. A key point in the research of Saunders and Saunders (2002) is that adult wages tend

Some employers do not always support earlier completion because of the prospect of having to pay higher wages sooner.

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.
>
> (Saunders & Saunders 2002, p.8)

Until recently, most awards that included rates of pay for apprentices made no provision for separate rates for adult apprentices. The vast majority of awards 'continue to base wage progression during an apprenticeship on duration of service, not achievement of competency' (Oliver 2011, p.48). In his examination of award wages, Oliver notes 'the method for determining the apprentice award wage in most cases did not take into account the age or level of schooling, even though apprentices are increasingly older and more likely to have completed year 12' (Oliver 2012, p.158). In Oliver's examination of the 20 awards that included adult apprentice rates of pay, he identified nine that simply provide for adult apprentices to receive a higher proportion of the appropriate trade-qualified rate. Others set a floor so that no adult apprentice can be paid less than a prescribed amount (often the minimum classification in the award). In addition to these provisions, a number of awards separately provided that an existing worker who is engaged as an apprentice will not suffer any reduction in pay for commencing the apprenticeship (Oliver 2011).

A comprehensive review for Fair Work Australia (Dunn et al. 2011) examined the history and development of apprentice and trainee wages and discussed the diversity in apprenticeship duration, adult apprenticeship rates and competency progression issues (see Box 3). They found that a total of 22 modern awards provide specific provisions for adult apprenticeships. They also found that:

- Adult apprentice wages across state and territory jurisdictions are not consistent.
- Apprentice provisions in modern awards can differ greatly between and within awards, especially in relation to pay structures.
- Some awards still provide nominal terms of three or four years duration, despite the possibility of the duration of apprenticeships varying, noting that VET legislation in each state and territory does, through its regulation of training arrangements, allow for competency-based training progression enabling early completion.
- Some modern awards explicitly address the question of who determines competency; for example, the Joinery and Building Trades Award 2010 specifies that competency is to be agreed between the registered training organisation, the employer and the apprentice (Dunn et al. 2011).

At the time of their research Dunn et al. (2011) identified only three modern awards which explicitly recognised accelerated completion, 'as a means for allowing early progression through an apprenticeship wage scale based on RPL on the basis of credit or previous experience of the apprentice' (Dunn et al. 2011, p.87). They included the Joinery and Building Trades Award 2010, the Textile, Clothing, Footwear and Associated Industries Award 2010 and the Plumbing and Fire Sprinklers Award 2010. In addition, the Hair and Beauty Industry Award 2010 provides specific wages for a worker undertaking a pre-apprenticeship; however, the award does not mention whether completion of the pre-apprenticeship leads to accelerated progression options in the apprenticeship (Dunn et al.

2011). The remaining awards make no reference to competency-based progression through the wage structure and any wage rates for apprentices refer to years (Oliver 2011).

Employers are more likely to support accelerated wage progression when they are satisfied with the training and assessment provided by the registered training organisation.

Box 3: Impacts of modern award arrangements on competency-based training progression for apprentices

There currently exists a diversity of arrangements in relation to the availability and regulation of competency-based training progression (CBTP) and competency-based wage progression (CBWP) arrangements for apprentices in the national, state and territory systems across Australia. As the Fair Work Act allows state and territory laws relating to training arrangements to continue to apply to apprentices, accordingly each state and territory continues to have differing arrangements, and the availability of CBWP and CBTP is not always mutually exclusive in each of the different jurisdictions. Indeed, each state and territory jurisdiction may have some overarching similarities (such as the facilitation of CBTP for apprentices), but how this is regulated between each jurisdiction can vary. From this review, it can be surmised that the only clear instances in which CBTP arrangements have been clearly linked to CBWP outcomes are at the national level through their facilitation in some select modern awards; and in Queensland where their industrial instruments (which had facilitated these arrangements) have been preserved by the Fair Work (Transitional Provisions and Consequential Amendments) Regulations 2009 (Dunn et al. 2011).

Note that Dunn et al. (2011) also provided a useful outline of apprentice competency-based trade progression and competency-based wage progression across the states and territories, included at appendix I in this report.

The modern awards specify that any state or territory training requirements must be met for wage progression to occur, and the state or territory apprenticeship authority has dispute-settling powers. But as Dunn et al. (2011) point out, accessing RPL has implications for both wage-level determination upon commencement of employment *as well as* wage progression, particularly if prior learning is *not recognised* (Dunn et al. 2011).

While employer participants in the Fair Work Australia research indicated overall acceptance of competency-based progression for wage setting, all employers waited until they were satisfied that their apprentice had demonstrated competency in the workplace before paying the higher wage. Although the training system is separate legislatively from employment and wage-setting matters, employers are more likely to support accelerated wage progression when they are satisfied with the training and assessment provided by the registered training organisation (Dunn et al. 2011).

The Australian Government has made a commitment 'to working with industry stakeholders to develop a model clause that supports a more flexible approach to training through the modern awards system and removes restrictions to competency-based progression from existing awards' (Australian Government 2011a). It supported the inclusion of recognition of prior learning and recognition of current competency provisions in modern awards under any reviews undertaken by Fair Work Australia to ensure that flexibility and mobility are promoted (Australian Government 2011a). In addition, it supported as a priority an approach that includes recognition of competency-based wage and training progression while also

taking into account factors such as existing skills, experience and age (Australian Government 2011a).

The issue of competency-based wage progression provisions in modern awards was considered during the Modern Awards Review in 2012.[10] The Apprentices' Full Bench Decision, issued on 12 December 2013,[11] identified five awards which have subsequently been varied to include new provisions for CBWP from 1 January 2014:

- Building and Construction General On-site Award 2010 (MA000020) — varied by determination PR545521
- Graphic Arts, Printing and Publishing Award 2010 (MA000026) — varied by determination PR545493
- Joinery and Building Trades Award 2010 (MA000029) — varied by determination PR545520
- Airline operations–Ground Staff Award 2010 (MA000048) — varied by determination PR545477
- Sugar Industry Award 2010 (MA000087) — varied by determination PR545516.

These variations reflected the criteria for competency-based completion found in clause 15.8 of the Manufacturing and Associated Industries and Occupations Award 2010, with an additional element which sets out the competency requirements for wage progression and how disputes regarding progression should be dealt with.[12] However, the Full Bench did not use the terminology of 'model clause' to describe these variations (pers. comm. Fair Work Commission, June 2014).

The investigation of all awards containing apprentice conditions identified only those listed above as containing the term 'competency-based wage progression' (see appendix J), although the majority do include provisions for 'competency-based progression', typically stated as 'the apprentice wage scales are based on a standard full-time apprenticeship of four years (unless the apprenticeship is of three years duration) or stages of competency-based progression (if provided for in this award)'.

In August 2013 the Fair Work Commission announced:

- Minimum award rates for adult apprentices will be increased, in recognition of the growing proportion of apprentices who are aged over 21 years (for apprentices commencing after 1 January 2014):
  - The rate of pay for a first-year adult apprentice will be 80% of the C10 award rate, while a second-year adult apprentice will receive the higher of the national minimum wage or the lowest adult classification rate in the award.
  - An employee who has worked full-time for an employer for at least six months or for 12 months as a part-time or casual employee before commencing an adult apprenticeship with the same employer will not suffer a reduction in their minimum rate of pay.

[10] <https://www.fwc.gov.au/modern-awards-review-2012/modern-awards-under-review/multiple-awards-full-bench-matters?filtera=1>.

[11] <https://www.fwc.gov.au/documents/decisionssigned/html/2013fwcfb9603.htm>.

[12] See Full Bench Decision [2013] FWCFB 5411, para 299.

- Special provisions should be made in relation to rates of pay and wage protection for adult apprentices: adult apprentice rates will be introduced into a number of awards which do not currently contain them.
- Provision should be made for competency-based wage progression to be introduced into several modern awards and for consideration to be given to its introduction into other modern awards where application [by unions] had been made; a model clause should be developed to facilitate the introduction of competency-based wage progression into other awards.

As at June 2014 there were no applications currently before the Fair Work Commission raising the issue of a model clause for competency-based wage progression in modern awards. The commission is conducting a four-yearly review of modern awards and as part of this review a Full Bench will be considering variations sought by the Australian Council of Trade Unions (ACTU) to reflect non-wage apprentice conditions in 37 awards. However, the ACTU 'does not intend to pursue provisions for competency-based wage progression as a common clause across modern awards' (Australian Council of Trade Unions 2014).

Given the rigorous efforts to improve uptake in recent years and the benefits of RPL generally the numbers are still considered low for trade apprentices when compared with other apprentices and students overall.

Conclusion

This study points to considerable demand for and uptake of alternative pathways into a trade. There are increasing numbers of individuals over the age of 25 years commencing a trade, completing their apprenticeships in a shorter timeframe, and using recognition of prior learning as part of their off-the-job training.

There is evidence of increased rates of RPL in the data for trade apprentices, and increases of RPL usage amongst qualification completions in the older age groups. Given the rigorous efforts to improve uptake in recent years and the benefits of RPL generally being widely acknowledged and supported (recognising there are still challenges), the numbers are still considered low for trade apprentices when compared with other apprentices and students overall.

While there is already some support and recognition of competency-based progression for apprentices via government policies and a number of industry projects targeting areas of demand, there remain a number of constraints. The *idea* of rewarding competency rather than time-based participation is championed amongst some, but is not being fully realised in *practice*. Despite some studies suggesting generally positive returns on investment outcomes for employers with adult apprentices, there is arguably less incentive for employers to support an RPL pathway, as the primary benefits lie with the individual.

A key issue emerging from the literature points to rigidity within the education and training system which impacts on the adult apprentice in their efforts to use RPL and skill set training for advanced entry and earlier completion. In particular, full implementation is presently hamstrung by the inconsistent application of RPL and a lack of understanding about the role and purpose of skill sets. The ad hoc nature of the support and practices surrounding RPL and early completion options creates barriers for both employers and individuals trying to navigate the system. This inconsistency and lack of flexibility is not a new issue, and solutions are not straightforward.

Of particular concern are the numbers of apprentice graduates reporting relevant prior skills and experience but whose training is not shortened as a result. While the literature acknowledges that RPL is not suited to everyone and that for some training is the preferred option, the Student Outcomes Survey data indicate that not all training providers are offering RPL assessments.

The cost of an RPL assessment can be high and varies across jurisdictions and between registered training providers. This suggests that broader issues, those associated with the various funding models and approaches to RPL, need to be considered.

More and effective recognition of prior learning requires: greater promotion; improved support and resources to assist individuals gather evidence; and trained and experienced professional assessors available to offer cost-effective skills recognition. It requires training providers to model a consistent and effective approach to RPL but also be supportive of the flexibility required to meet individual and employer needs. This requires funding models and audit and compliance regimes that genuinely support the flexibility required. The data suggest that efforts amongst jurisdictions do matter.

To be fair, some of the issues reside with the individual attitudes and cultural barriers of employers — with respect to alternative models of apprenticeships and unconventional models of skill development. For many adults it is not an easy decision and finding the motivation and willingness to engage in reskilling, either in response to personal preference or structural change in their employment, is challenging. Once that decision has been made, it is essential that the options and opportunities available to them are clear and they receive the support and encouragement required.

Employers who support adult apprentices believe that their return on investment is greater compared with that experienced for younger apprentices.

Resistance amongst employers is being addressed through a number of successful initiatives, for example, specific government-funded industry programs and to some degree the National Apprenticeships Program. A perennial challenge is encouraging a shift to a culture of competency-based rather than time-based progression amongst industry and training providers, regardless of which model is used — early sign-off or advanced entry. The National Apprenticeships Program and other industry studies suggest that strict selection criteria and substantial additional support are required by employers and providers to support applicants through the RPL process and the advanced entry pathway. This is a labour-intensive option that does not suit all individuals, employers or industries and may not be sustainable in the long-term. Nevertheless, greater awareness about the range of options available is required to assist individuals with choice and the provision of consistent information.

Training providers and employers need to be in a position to meet demand. This is important as the data indicate that adult apprentices with RPL activity are enrolling in courses leading to occupations in skill shortage areas. This is in part due to the range of employer and apprentice incentives provided under occupations on the National Skills Needs List. Nevertheless, as training providers play a critical role in RPL assessments, they have an obligation to work with employers and apprentices in ensuring successful implementation.

Employers would also benefit from clearer information and guidance in supporting adult apprentices on a non-traditional pathway. Industry can also play a role in taking longer-term approaches to investment in a broad range of skills and providing increased capacity for on-the-job learning options. In addition, while provisions in modern awards acknowledge competency-based progression as an option, there appears to be little effort to address competency-based wage progression, which in itself supports adults using RPL.

The growth in skill sets over recent years suggests greater demand, while the proportion of adult apprentices with relevant prior skills indicates a need for skill set training as a suitable pathway into a trade. Although not a direct indication of skill set use (which is currently not available in the administrative data), the proportion of trade apprentice graduates 25 years and over who have *completed qualifications* involving at least one subject where RPL was granted is twice that of the 24 years and under group, an interesting phenomenon.

Australian studies suggest positive returns for adult apprentices in terms of employment, job security and satisfaction. Employers who support adult apprentices believe that their return on investment is greater compared with that experienced for younger apprentices. The time taken to realise monetary rewards can be substantial for the apprentice, although the international studies seem to suggest the existence of some wage incentives for adult apprentices completing earlier. In Australia, overall employment outcomes are about the same for adults using RPL for advanced entry and early completion compared with those under 24 years on a traditional pathway. While the average annual wage for those who obtained RPL is $800 higher compared with those who did not use RPL but had relevant prior

Of interest also is the smaller proportion of adult trade apprentices with RPL reporting employment at a higher skill level compared with those without RPL.

experience, further analyses are required to determine whether the differences are statistically significant and not due to other interacting factors.

Of interest also is the smaller proportion of adult trade apprentices with RPL reporting employment at a higher skill level compared with those without RPL. This may be reflective of the need for some individuals to move into jobs requiring lower skills when faced with the prospect of unemployment.

It is too early to see the full impact of the changes introduced by the Fair Work Commission with respect to increasing award rates of pay for adults and introducing competency-based wage progression in modern awards. The question remains whether these changes will be enough to genuinely recognise the skills, work experience and alternative pathways for adult apprentices and whether these arrangements will ameliorate the inconsistencies in national, state and territory systems across Australia, as identified by Dunn et al. (2011). The tightening of incentives for existing workers and the removal of apprentice payments under the Support for Adult Australian Apprenticeships initiative from July 2015 may adversely affect the previously reported positive return on investment results for both employers and apprentices as well as impact on the overall growth in adult apprentice numbers.

This study confirms that the nature of apprenticeships is changing. While this is a relatively recent phenomenon, the research literature to date has mostly focused on the traditional apprenticeship pathway for the under 25 years cohort rather than on adults in traditional trades. Interestingly, the extent of the research in this area has not changed much since the Saunders and Saunders report of 2002. There remains a gap in the literature directly related to adult apprentices, including an examination of the impacts of skills recognition, competency-based progression and wage setting on adult apprentices.

An excellent foundation exists through the unlimited potential of a competency-based approach, the nature of the Australian vocational training system, (which encourages inclusion of adult learners), and a sustained recent effort by governments to support earlier completion models and RPL implementation, and is beginning to be reflected in the data. Imminent improvements to the administrative collections with the introduction of skill set reporting and the unique student identifier will enable finer reporting of the benefits and outcomes of advanced entry and earlier completion for the adult apprentice in the future.

References

Australian Council of Trade Unions 2014, *Award review 2014 — Australian Council of Trade Unions (ACTU) common claim for apprentice conditions submission to Fair Work Commission 19 May 2014*, viewed 26 June 2014, <http://www.fwc.gov.au/documents/sites/awardsmodernfouryr/AM201465andors-corr-ACTU-190514.pdf>.

Australian Government 2011a, 'The Australian Government's response to the Expert Panel recommendations', viewed 13 June 2014, <http://www.australianapprenticeships.gov.au/publications/australian-government%E2%80%99s-response-expert-panel-recommendations>.

——2011b, *A shared responsibility — apprenticeships for the 21st century: final report of the expert panel*, DEEWR, Canberra, viewed 13 June 2014, <http://www.australianapprenticeships.gov.au/publications/shared-responsibility-apprenticeships-21st-century>.

——2013a, 'The Accelerated Australian Apprenticeships Initiative', viewed 13 June 2014, <http://www.australianapprenticeships.gov.au/program/accelerated-australian-apprenticeships-initiative>.

——2013b, Alternative pathways to the trades — pilot, viewed 13 June 2014, <http://www.australianapprenticeships.gov.au/news/alternative-pathways-trades-pilot-program>.

——2014, Australian Apprenticeships incentives, viewed 12 June 2014, <http://www.aapathways.com.au/Information---Links/Networks-and-Resources>.

Australian Industry Group 2010, *Faster, Smarter, Higher Trade Outcomes Project: final report*, Ai Group, Sydney, viewed 17 April 2014, <http://www.aigroup.com.au/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/LIVE_CONTENT/Publications/Reports/2010/9151_faster_smarter_higher_trade_outcomes_project_web.pdf>.

Australian Workplace Productivity Agency 2014, *Manufacturing workforce study — issues paper*, AWPA, Canberra, viewed 14 April 2015, <http://www.awpa.gov.au/our-work/sector-specific-skill-needs/Manufacturing_workforce_study/Pages/default.aspx>.

Bednarz, A 2014, *Understanding the non-completion of apprentices*, NCVER, Adelaide.

Callan, VJ 2008, *Accelerated apprenticeships: apprentice, employer and teaching staff perceptions*, NCVER, Adelaide.

Cameron, R 2004, *RPL and mature age job seekers*, Adult Learning Australia, Canberra.

Coelli, M, Tabasso, D & Zakirova, R 2012, *Studying beyond age 25: who does it and what do they gain?*, NCVER, Adelaide.

Davies, L 2014, 'Skills recognition and recognition of prior learning for workforce development: challenges and possibilities', in R Harris & T Short (eds), *Workforce development: perspectives and issues*, Springer, Singapore, pp.75—91.

Dunn, A, Rozenbes, D, Maltman, K, Leung, E, Pung, A, Waugh, B, Dixon, C, Cagorski, T, Linehan, A & Tisseverasinghe, R 2011, *Australian apprentice minimum wages in the national system*, Fair Work Australia, Canberra, viewed 17 April 2014, <http://www.fwa.gov.au/sites/wagereview2011/research/Research_Report_6-2011.pdf>.

Empey, B & Newton, C 2009, 'PLAR, training and efficient labour markets: the Canadian experience', in R Maclean & DN Wilson (eds), *International handbook of education for the changing world of work: bridging academic and vocational learning*, Springer, Dordrecht, pp.2647—59.

Fair Work Commission 2013, *Transitional review of modern awards — apprentices, trainees and juniors: common claims*, viewed 13 June 2014, <https://www.fwc.gov.au/about-us/news-and-events/summary-significant-decision-published-transitional-review-modern-awards>.

Ferrier, F, Burke, G & Selby Smith, C 2008, *Skills development for a diverse older workforce*, NCVER, Adelaide.

Fine, J 2006, *Addressing barriers to the employment and training of apprentices and trainees in the Australian minerals industry: a summary*, Minerals Council of Australia, Canberra, viewed 17 April 2014, <http://hdl.voced.edu.au/10707/40784>.

Fok, YK & Tseng, Y-P 2009, *Wage transitions of apprentices*, Melbourne Institute of Applied Economic and Social Research, Melbourne, viewed 17 April 2014, <http://melbourneinstitute.com/downloads/labour/2-08%20Final%20Report.pdf>.

Forbes, J 2008, *RPL: A practitioner's journey*, TAFE NSW, viewed 1 October 2014, <http://lrrpublic.cli.det.nsw.edu.au/lrrSecure/Sites/Web/13289/ezine/year_2008/may/podcast_prac_journy.htm>.

Fraser, C, Murray, J & Dixon, M 2014, 'Apprentices and graduates — maintaining recruitment to avoid future skill shortages', *AusIMM Bulletin, National*, 1 February.

Hargreaves, J 2006, *Recognition of prior learning: at a glance*, NCVER, Adelaide.

Higton, J, Tu, T, Emmett, R & Colahan, M 2013, *Apprenticeship evaluation: learners*, Department for Business, Innovation and Skills, London, viewed 17 April 2014, <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229998/bis-13-1126-apprenticeship-evaluation-learners.pdf>.

Karmel, T & Liu, S 2011, *Which paths work for which young people?*, NCVER, Adelaide.

Karmel, T & Misko, J 2009, *Apprenticeships and traineeships in the downturn*, NCVER, Adelaide.

Karmel, T & Mlotkowski, P 2010, *The impact of wages on the probability of completing an apprenticeship or traineeship*, NCVER, Adelaide.

Knight, B 2011, *Government financial support*, NCVER Report 1: Overview of the Australian apprenticeship and traineeship system, viewed 14 April 2014, <http://www.australianapprenticeships.gov.au/publications/ncver-report-1-overview-australian-apprenticeship-and-traineeship-system>.

——2012, *Evolution of apprenticeships and traineeships in Australia: an unfinished history*, NCVER, Adelaide.

Knight, B, Karmel, T & Guthrie, H 2011, *The efficiency of the apprenticeship and traineeship system*, NCVER Report 2: Overview of apprenticeship and traineeship institutional structures, viewed 13 June 2014, <http://www.australianapprenticeships.gov.au/publications/ncver-report-2-overview-apprenticeship-and-traineeship-institutional-structure>.

Leary, C 2009, *Council of Australian Governments (COAG) Recognition of Prior Learning (RPL) Final Program report — analysis of the COAG RPL program outcomes*, DEEWR, Canberra

Long, M & Shah, C 2008, *Private returns to vocational education and training qualifications*, NCVER, Adelaide.

Manufacturing Skills Australia (MSA) 2014, *Environmental scan 2014*, Manufacturing Skills Australia, Canberra.

Mills, J, Crean, D, Ranshaw, D & Bowman, K 2012, *Workforce skills development and engagement in training through skill sets*, NCVER monograph series no. 11/2012, NCVER, Adelaide.

Misko, J 2008, *Combining formal, non-formal and informal learning for workforce skill development*, NCVER, Adelaide.

——2010, *Responding to changing skill demands: training packages and accredited courses*, NCVER, Adelaide.

Mitchell, J, Dobbs, G & Ward, J 2010, *It's not about age: pathways for engagement in employing mature age people and existing workers as apprentices: an employer perspective*, Australian Chamber of Commerce and Industry, Canberra, viewed 17 April 2014, <http://www.acci.asn.au/Research-and-Publications/Issues-Papers/Human-Capital/It-s-Not-About-Age>.

NCVER (National Centre for Vocational Education Research) 2013a, *Australian vocational education and training statistics: apprentices and trainees 2012 — annual*, NCVER, Adelaide.

——2013b, *Australian vocational education and training statistics: employers' use and views of the VET system 2013*, NCVER, Adelaide.

——2014a, *Australian vocational education and training statistics: students and courses 2014*, NCVER, Adelaide.

——2014b, *Australian vocational education and training statistics: the likelihood of completing a VET qualification 2009—12*, NCVER, Adelaide.

Nechvoglod, L, Karmel, T & Saunders, J 2009, *The cost of training apprentices*, NCVER, Adelaide.

OECD (Organisation for Economic Co-operation and Development) 2009, *Learning for jobs: OECD policy review of vocational education and training initial report*, Paris.

Oliver, D 2011, *The apprenticeship and traineeship system's relationship with the regulatory environment*, NCVER research report 3 for the Apprenticeships for the 21st Century Expert Panel, viewed 13 June 2014, <http://www.australianapprenticeships.gov.au/publications/ncver-report-3-apprenticeship-and-traineeship-system%E2%80%99s-relationships-regulatory-environment>.

——2012, 'An examination of award wages among Australian apprentices and trainees', *Australian Bulletin of Labour*, vol.38, no.2, pp.158—76.

Pricewaterhouse Coopers 2013, 'National Apprenticeships Program Independent Evaluation', conducted for East Coast Apprenticeships and copy provided to NCVER for the purposes of this research.

Ray, J 2001, *Apprenticeship in Australia: an historical snapshot*, NCVER, Adelaide.

Saunders, S & Saunders, J 2002, *Getting adults into the trades*, NCVER, Adelaide.

Smith, E, Smith, A & Selby Smith, C 2010, 'Old dogs, new tricks: training mature-aged manufacturing workers', *Journal of Workplace Learning*, vol.22, no.5, pp.277—91.

Sparks, A, Ingram, I & Phillips, S 2009, 'Advanced entry adult apprenticeship training scheme: a case study', *Education and training*, vol.59, no.3, pp.190—202.

United Kingdom Commission for Employment and Skills 2012, *International approaches to the development of intermediate level skills and apprenticeships: synthesis report*, UKCES, Wath-upon-Dearne, viewed 17 April 2014, <http://www.ukces.org.uk/publications/er42-intl-approaches-dev-int-skills-and-apps>.

United Kingdom Department for Business, Innovation and Skills 2011, *Age and returns to training*, report by Frontier Economics and Institute for Fiscal Studies, London, viewed 17 April 2014 <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32280/11-1039-age-and-returns-to-training.pdf>.

——2012, *Prior qualifications of adult apprentices 2010/2011*, London, viewed 17 April 2014, <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/p/12-p169-prior-qualifications-of-adult-apprentices-2010-2011>.

United Kingdom Learning and Skills Council 2009, *The benefits of completing an apprenticeship*, Learning and Skills Council, Coventry, viewed 17 April 2014, <http://readingroom.lsc.gov.uk/lsc/national/294468_-_Benefits_of_completing_an_apprenticeship.pdf>.

United Kingdom National Audit Office 2012a, *Adult apprenticeships*, NAO, London, viewed 17 April 2014, <http://www.nao.org.uk/report/adult-apprenticeships/>.

——2012b, *Adult apprenticeships: estimating economic benefits from apprenticeships: technical paper*, NAO, London, viewed 17 April 2014, <http://www.nao.org.uk/wp-content/uploads/2012/02/10121787_Technical_paper.pdf>.

University of Sydney, Workplace Research Centre 2012, *A step into the breach: group training initiatives and innovations using competency-based progression*, Group Training Australia, Sydney, viewed 17 April 2014, <http://www.grouptraining.com.au/_literature_124969/2012_Competency_based_training_and_assessment_report>.

Westacott, J 2014, 'Redefining vocational learning in the global economy Swinburne University 2014: Chancellor's lecture', viewed 26 June 2014, <http://the-scan.com/2014/06/23/redefining-vocational-learning-in-the-global-economy/>.

Appendix A

Literature review search strategy

Literature from Australia, the United Kingdom, Europe, the United States and Canada was sourced to inform this study using VOCEDplus, Google/Google Scholar, ERIC and VETBib (Cedefop). The terminology for the search criteria is listed below. The main time period covered was 2009 to 2014, although earlier relevant research has also been included.

An important point to note is a gap in the literature with respect to specific studies on adult apprentices as a separate group.

Themes

- older adult apprentices (mature; mature aged; non-traditional) aged 25+ entering apprenticeships via alternative pathway to traditional school route
- benefits/pay-off to the apprentice from completing, with a particular focus on the extent of RPL; skill set training; accelerated programs
- employment outcomes
- wages
- pathways to higher qualifications
- return on investment
- Australia in general but some comparison with international.

Terminology used

mature age; existing workers; older worker; adult apprentices; mature-age apprentices

adult apprenticeships (UK) 19+; modern apprenticeships; Advanced entry

return OR returns OR "return on investment" OR benefit OR benefits OR pay-off OR pay-offs

"employment outcomes" OR employability" OR wage OR wages OR "Wage rate"

pathways OR "higher qualifications" OR "higher apprenticeship" OR "Higher qualification" OR "Higher level" OR "higher apprenticeships"

accelerated OR "fast track" OR "fast tracked" OR “competency-based progression” OR “fast-track apprenticeships” OR “early completion” OR “shorter duration apprenticeships” OR “Accelerated apprenticeships”

"recognition of prior learning" OR RPL OR accreditation of prior learning" OR APL OR "accreditation of prior experiential learning" OR APEL OR "current competence" OR "current competency" OR “credit transfer” OR PLAR OR “prior learning assessment and recognition” [Canadian term]

“skill set training" OR "skill sets training" OR "skill set" OR "skill sets" OR "in demand skill" OR "in demand skills" OR "skill shortage" OR "skill shortages"

"skills recognition" "recognition of prior learning" "workforce development"

Appendix B

The National Apprenticeships Program

The National Apprenticeships Program (NAP) was developed by East Coast Apprenticeships, a not-for-profit group training organisation with more than 20 years industry experience, to specifically address the growing shortage of skilled workers in the minerals and energy sectors. NAP's solution was the Advanced Entry Adult Apprenticeship scheme — an innovative alternative for talented Australians with extensive trade skills and experience, but not necessarily holding a formal qualification, to complete trade training, potentially within 18 months.

The program was supported by substantial government funding.

The data are collected through a purpose-built 'Applicant and Campaign Tracker', which is captured in an Access data base. All applications are registered through the National Apprenticeships Program website, which is a CMS Program. Applications are downloaded into the Tracker to be desktop-audited for eligibility. The Tracker is used to manage campaigns; its search functions include: location, preferred trade, trade experience, background information (Out of Trade, Defence Force, Trades Assistant, Overseas Qualification, Existing aligned trade), referred from (for media purposes). A word search can be used in the resume section. The data are used to locate applicable applicants for employers with specific skills and locations. Predominately, the data statistics were used for Commonwealth reporting requirements to track the number of applicants per state and eligibility numbers, including trade preferences and successes.

Further information can be found at:

<https://nationalapprenticeships.com.au/>

<http://nationalapprenticeships.com.au/index.php?page=success-stories-2>

<http://www.mineralscouncil.com.au/file_upload/files/statements/NAP1stgraduate.pdf>

<http://www.innovation.gov.au/Skills/SkillsTrainingAndWorkforceDevelopment/Documents/NAP.pdf>

<http://www.pc.gov.au/__data/assets/pdf_file/0017/131309/sub009-infrastructure.pdf>.

Appendix C

Training package data

This appendix provides apprentice and trainee commencements and completions in trades occupations by training packages and age group for the 2013 year. The training packages are sorted from those with the largest number of commencements/completions to the smallest number of commencements/completions.

Commencements

Table C1 Top five training packages by age group for apprenticeship[1] commencements 12 months ending December 2013

	24 years and under	25 to 44 years	45 years and over
1	CPC – Construction, Plumbing and Services Integrated Framework (includes BCF, BCG, BCP)	MSS – Sustainability	MSS – Sustainability
2	AUR – Automotive Industry Retail, Service and Repair	ICT – Integrated Telecommunications	ICT – Integrated Telecommunications
3	UEE – Electrotechnology Industry (includes UTE, UTL)	RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)
4	MEM – Metal and Engineering Industry	CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)
5	SIT – Tourism, Hospitality and Events (includes THH, THT)	MEM – Metal and Engineering Industry	MEM – Metal and Engineering Industry

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table C2 Apprenticeship[1] commencements by training package, 24 years and under, 12 months ending December 2013

Training package	Number	%
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	14 857	25.2
AUR – Automotive Industry Retail, Service and Repair	8 299	14.1
UEE – Electrotechnology Industry (includes UTE, UTL)	7 491	12.7
MEM – Metal and Engineering Industry	5 352	9.1
SIT – Tourism, Hospitality and Events (includes THH, THT)	4 911	8.3
SIH – Hairdressing (includes WRH)	4 358	7.4
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	2 350	4.0
LMF – Furnishing Industry	1 793	3.0
MTM – Australian Meat Industry	1 471	2.5
ICT – Integrated Telecommunications	1 356	2.3
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	1 066	1.8
MSS – Sustainability	1 020	1.7
ICA – Information and Communications Technology	949	1.6
FDF – Food Processing Industry	637	1.1
ACM – Animal Care and Management (includes RUV)	427	0.7
CUF – Screen and Media	356	0.6
MSL – Laboratory Operations (includes PML)	353	0.6

Training package	Number	%
ICP – Printing and Graphic Arts	317	0.5
MEA – Aeroskills	302	0.5
UET – Transmission, Distribution and Rail (includes UTT)	251	0.4
RGR – Racing Industry	165	0.3
AUM – Automotive Industry Manufacturing	148	0.3
SFL – Floristry (includes WRF)	119	0.2
HLT – Health	112	0.2
BSB – Business Services (includes BSA)	69	0.1
PMA – Chemical, Hydrocarbons and Oil Refining	63	0.1
CUE – Entertainment Industry	56	0.1
MSA – Manufacturing (includes MCM)	56	0.1
LMT – Textiles, Clothing and Footwear	41	0.1
FPI – Forest and Forest Products Industry	35	0.1
CPP – Property Services (includes PRD, PRM PRS)	25	0.0
PMB – Plastics, Rubber and Cablemaking	13	0.0
UEG – Gas Industry (includes UTG)	12	0.0
CUL – Library, Information and Cultural Services	7	0.0
CUS – Music	3	0.0
LGA – Local Government	2	0.0
CUV – Visual Arts, Craft and Design	1	0.0
Non-training package	29	0.0
Total	**58 873**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table C3 Apprenticeship[1] commencements by training package, 25–44 years, 12 months ending December 2013

Training package	Number	%
MSS – Sustainability	5 324	18.4
ICT – Integrated Telecommunications	4 161	14.4
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	3 176	11.0
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	2 359	8.1
MEM – Metal and Engineering Industry	2 208	7.6
UEE – Electrotechnology Industry (includes UTE, UTL)	2 042	7.0
SIT – Tourism, Hospitality and Events (includes THH, THT)	1 573	5.4
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	1 544	5.3
AUR – Automotive Industry Retail, Service and Repair	1 515	5.2
MTM – Australian Meat Industry	1 196	4.1
MSL – Laboratory Operations (includes PML)	750	2.6
BSB – Business Services (includes BSA)	597	2.1
SIH – Hairdressing (includes WRH)	454	1.6
LMF – Furnishing Industry	301	1.0
PMA – Chemical, Hydrocarbons and Oil Refining	234	0.8
ICP – Printing and Graphic Arts	226	0.8
UET – Transmission, Distribution and Rail (includes UTT)	208	0.7
HLT – Health	199	0.7
FDF – Food Processing Industry	173	0.6
MSA – Manufacturing (includes MCM)	157	0.5
ICA – Information and Communications Technology	137	0.5
MEA – Aeroskills	92	0.3
ACM – Animal Care and Management (includes RUV)	68	0.2

Training package	Number	%
PMB – Plastics, Rubber and Cablemaking	63	0.2
RGR – Racing Industry	54	0.2
AUM – Automotive Industry Manufacturing	29	0.1
FPI – Forest and Forest Products Industry	29	0.1
CPP – Property Services (includes PRD, PRM PRS)	26	0.1
LMT – Textiles, Clothing and Footwear	23	0.1
SFL – Floristry (includes WRF)	16	0.1
UEG – Gas Industry (includes UTG)	13	0.0
CUL – Library, Information and Cultural Services	8	0.0
CUE – Entertainment Industry	4	0.0
LGA – Local Government	2	0.0
CUF – Screen and Media	1	0.0
UEP – Electricity Supply Industry – Generation Sector (includes UTP)	1	0.0
Non-training package	19	0.1
Total	**28 983**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table C4 Apprenticeship[1] commencements over 12 months by training package, 45 years and over, 12 months ending December 2013

Training package	Number	%
MSS – Sustainability	3 854	36.8
ICT – Integrated Telecommunications	1 285	12.3
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	1 201	11.5
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	623	6.0
MEM – Metal and Engineering Industry	565	5.4
MTM – Australian Meat Industry	533	5.1
SIT – Tourism, Hospitality and Events (includes THH, THT)	453	4.3
MSL – Laboratory Operations (includes PML)	415	4.0
BSB – Business Services (includes BSA)	324	3.1
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	276	2.6
ICP – Printing and Graphic Arts	160	1.5
AUR – Automotive Industry Retail, Service and Repair	155	1.5
UEE – Electrotechnology Industry (includes UTE, UTL)	147	1.4
HLT – Health	92	0.9
PMA – Chemical, Hydrocarbons and Oil Refining	81	0.8
MSA – Manufacturing (includes MCM)	62	0.6
SIH – Hairdressing (includes WRH)	39	0.4
FDF – Food Processing Industry	38	0.4
LMF – Furnishing Industry	31	0.3
ICA – Information and Communications Technology	24	0.2
PMB – Plastics, Rubber and Cablemaking	15	0.1
UET – Transmission, Distribution and Rail (includes UTT)	14	0.1
CUL – Library, Information and Cultural Services	13	0.1
AUM – Automotive Industry Manufacturing	11	0.1
ACM – Animal Care and Management (includes RUV)	10	0.1
MEA – Aeroskills	9	0.1
RGR – Racing Industry	8	0.1
UEG – Gas Industry (includes UTG)	7	0.1
CPP – Property Services (includes PRD, PRM PRS)	4	0.0
FPI – Forest and Forest Products Industry	4	0.0

Training package	Number	%
LMT – Textiles, Clothing and Footwear	2	0.0
SFL – Floristry (includes WRF)	2	0.0
CUF – Screen and Media	1	0.0
THC – Caravan Industry	1	0.0
Non-training package	1	0.0
Total	**10 462**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Completions

Table C5 Apprenticeship[1] completions by training package, 24 years and under, 12 months ending December 2013

	Number	%
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	9 011	26.5
AUR – Automotive Industry Retail, Service and Repair	4 794	14.1
UEE – Electrotechnology Industry (includes UTE, UTL)	4 401	12.9
MEM – Metal and Engineering Industry	4 034	11.9
SIH – Hairdressing (includes WRH)	2 520	7.4
SIT – Tourism, Hospitality and Events (includes THH, THT)	1 912	5.6
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	1 009	3.0
LMF – Furnishing Industry	982	2.9
MTM – Australian Meat Industry	828	2.4
ICA – Information and Communications Technology	732	2.2
CUF – Screen and Media	534	1.6
FDF – Food Processing Industry	449	1.3
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	375	1.1
MEA – Aeroskills	364	1.1
ICT – Integrated Telecommunications	279	0.8
ACM – Animal Care and Management (includes RUV)	263	0.8
MSL – Laboratory Operations (includes PML)	233	0.7
UET – Transmission, Distribution and Rail (includes UTT)	230	0.7
ICP – Printing and Graphic Arts	213	0.6
MSA – Manufacturing (includes MCM)	146	0.4
RGR – Racing Industry	94	0.3
AUM – Automotive Industry Manufacturing	91	0.3
HLT – Health	89	0.3
CUE – Entertainment Industry	64	0.2
SFL – Floristry (includes WRF)	55	0.2
BSB – Business Services (includes BSA)	43	0.1
MSS – Sustainability	41	0.1
PMA – Chemical, Hydrocarbons and Oil Refining	38	0.1
FPI – Forest and Forest Products Industry	18	0.1
THC – Caravan Industry	17	0.0
LMT – Textiles, Clothing and Footwear	13	0.0
CUS – Music	3	0.0
LGA – Local Government	3	0.0
PMB – Plastics, Rubber and Cablemaking	3	0.0
CPP – Property Services (includes PRD, PRM PRS)	2	0.0
UEG – Gas Industry (includes UTG)	2	0.0

	Number	%
Non-training package	122	0.4
Total	**34 008**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table C6 Apprenticeship[1] completions by training package, 25–44 years, 12 months ending December 2013

	Number	%
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	2 280	12.8
MSA – Manufacturing (includes MCM)	2 161	12.1
UEE – Electrotechnology Industry (includes UTE, UTL)	2 035	11.4
MEM – Metal and Engineering Industry	1 735	9.7
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	1 462	8.2
AUR – Automotive Industry Retail, Service and Repair	1 299	7.3
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	963	5.4
SIT – Tourism, Hospitality and Events (includes THH, THT)	810	4.5
MSL – Laboratory Operations (includes PML)	606	3.4
ICT – Integrated Telecommunications	598	3.3
MTM – Australian Meat Industry	568	3.2
HLT – Health	525	2.9
UET – Transmission, Distribution and Rail (includes UTT)	335	1.9
LMF – Furnishing Industry	283	1.6
MSS – Sustainability	279	1.6
SIH – Hairdressing (includes WRH)	271	1.5
BSB – Business Services (includes BSA)	268	1.5
PMA – Chemical, Hydrocarbons and Oil Refining	253	1.4
MEA – Aeroskills	236	1.3
ICP – Printing and Graphic Arts	211	1.2
FDF – Food Processing Industry	188	1.1
ICA – Information and Communications Technology	135	0.8
AUM – Automotive Industry Manufacturing	62	0.3
ACM – Animal Care and Management (includes RUV)	61	0.3
RGR – Racing Industry	60	0.3
FPI – Forest and Forest Products Industry	43	0.2
SFL – Floristry (includes WRF)	17	0.1
UEP – Electricity Supply Industry – Generation Sector (includes UTP)	13	0.1
CUL – Library, Information and Cultural Services	12	0.1
LMT – Textiles, Clothing and Footwear	9	0.1
UEG – Gas Industry (includes UTG)	9	0.1
CPP – Property Services (includes PRD, PRM PRS)	8	0.0
THC – Caravan Industry	8	0.0
PMB – Plastics, Rubber and Cablemaking	7	0.0
CUE – Entertainment Industry	6	0.0
CUF – Screen and Media	3	0.0
CUS – Music	2	0.0
NWP – Water Industry (includes UTW)	1	0.0
Non-training package	49	0.3
Total	**17 873**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table C7 Apprenticeship[1] completions over 12 months by training package, 45 years and over, 12 months ending December 2013

	Number	%
MSA – Manufacturing (includes MCM)	2 349	32.4
HLT – Health	1 225	16.9
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	651	9.0
MTM – Australian Meat Industry	324	4.5
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	323	4.5
MSS – Sustainability	313	4.3
MEM – Metal and Engineering Industry	267	3.7
SIT – Tourism, Hospitality and Events (includes THH, THT)	264	3.6
MSL – Laboratory Operations (includes PML)	208	2.9
BSB – Business Services (includes BSA)	186	2.6
ICT – Integrated Telecommunications	154	2.1
UEE – Electrotechnology Industry (includes UTE, UTL)	138	1.9
ICP – Printing and Graphic Arts	133	1.8
PMA – Chemical, Hydrocarbons and Oil Refining	133	1.8
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	131	1.8
AUR – Automotive Industry Retail, Service and Repair	130	1.8
LMF – Furnishing Industry	49	0.7
MEA – Aeroskills	33	0.5
RGR – Racing Industry	32	0.4
FDF – Food Processing Industry	31	0.4
ICA – Information and Communications Technology	23	0.3
SIH – Hairdressing (includes WRH)	23	0.3
UET – Transmission, Distribution and Rail (includes UTT)	20	0.3
AUM – Automotive Industry Manufacturing	18	0.2
CUL – Library, Information and Cultural Services	18	0.2
ACM – Animal Care and Management (includes RUV)	14	0.2
FPI – Forest and Forest Products Industry	14	0.2
UEG – Gas Industry (includes UTG)	13	0.2
UEP – Electricity Supply Industry – Generation Sector (includes UTP)	8	0.1
PMB – Plastics, Rubber and Cablemaking	5	0.1
CPP – Property Services (includes PRD, PRM PRS)	4	0.1
LMT – Textiles, Clothing and Footwear	3	0.0
SFL – Floristry (includes WRF)	3	0.0
CUF – Screen and Media	2	0.0
CUE – Entertainment Industry	1	0.0
THC – Caravan Industry	1	0.0
Non-training package	0	0.0
Total	**7 242**	**100.0**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Appendix D

Specific projects focusing on early completions and mature-age workers

Competency-based progression and completion for engineering trades project

<http://www.aigroup.com.au/portal/site/aig/education/engineeringexcellence/>

Ai Group has been contracted by the Australian Government to implement reform of apprenticeship training by effecting completions and pay progressions that are genuinely based on achievement of competency. Ten pilot programs are being conducted in six states, with participating registered training organisations developing processes for their entire cohort of engineering apprentices. These processes include stronger links between structured off-the-job training and what apprentices do in the workplace, and also testing new training delivery patterns to reflect the nominal duration of apprenticeships rather than a traditional three-year training program. Altogether, more than 3500 engineering apprentices are covered by the project.

Fast tracking apprentices in horticulture industry

<http://workforcedevelopment.edu.au/business-areas/agri-food/horticulture/1861/>

Australian Workforce Development Solutions is a business unit of TAFE NSW — Western Sydney Institute (WSI), one of the largest registered training organisations in Australia. Western Sydney Institute is currently working on a Commonwealth-funded project to pilot a scheme of fast-tracking apprentices in the retail nursery industry. The aim is to reduce the training time substantially by combining recognition of prior learning services and workplace training and assessment. Involving the nursery in the training and assessment means that training can be focused on the activities the apprentice is currently undertaking in the workplace, which results in a more targeted approach to skills development.

Investing in Experience (Skills Recognition & Training)

<http://www.innovation.gov.au/Skills/SkillsTrainingAndWorkforceDevelopment/InvestingInExperienceSkillsRecognitionAndTraining/Pages/default.aspx>

Investing in Experience (Skills Recognition & Training) is an Australian Government initiative to support mature-age workers (aged 50 years and over) to gain a qualification that matches their skills. Through a skills assessment and, if needed, gap training, mature-age workers can attain a nationally recognised qualification at the certificate III to advanced diploma levels.

Employers can access support through the Skills Connect Fund. Australian Government funding of up to $4400 (GST-inclusive) may be available to employers for eligible workers aged 50 years and over. Any costs over this base level amount are subject to the co-contribution arrangements outlined in the Skills Connect Fund Guidelines.

For workers aged over 50 years, a formal skills assessment process (recognition of prior learning or current competency) must be undertaken by a registered training organisation which is authorised to deliver the training. If the skills assessment identifies that gap training is required for a qualification to be awarded, this should be delivered by the training organisation in an arrangement that meets the preferences of the workers and the employer. The costs and results of the skills assessment will be required to be reported under a funding agreement.

Appendix E

Further analyses on adults completing earlier

Statistics on apprenticeship completions by duration of training and age in 2013 for each state and territory is provided in table E1. Tables E2 and E3 provide further analyses on the apprenticeships completed within two years.

Table E1 Apprenticeship completions[1] at certificate III or higher by state or territory, age group and duration of training, 12 months ending December 2013

	Up to 2 years	Over 2 and up to 3 years	Over 3 years	Total	
	%	%	%	%	Number
New South Wales					
24 years and under	29.9	18.7	51.4	100.0	9 688
25 to 44 years	51.7	18.7	29.6	100.0	4 232
45 years and over	83.3	11.9	4.8	100.0	2 588
Total	**43.8**	**17.7**	**38.5**	**100.0**	**16 508**
Victoria					
24 years and under	32.8	21.6	45.6	100.0	8 356
25 to 44 years	55.6	17.2	27.2	100.0	4 430
45 years and over	87.8	6.7	5.5	100.0	1 724
Total	**46.3**	**18.5**	**35.2**	**100.0**	**14 510**
Queensland					
24 years and under	34.2	17.0	48.9	100.0	7 596
25 to 44 years	61.9	16.8	21.3	100.0	4 528
45 years and over	80.8	12.7	6.5	100.0	1 599
Total	**48.8**	**16.4**	**34.8**	**100.0**	**13 723**
South Australia					
24 years and under	16.6	14.9	68.5	100.0	2 069
25 to 44 years	45.6	22.1	32.3	100.0	1 082
45 years and over	63.7	21.8	14.7	100.0	408
Total	**30.8**	**17.9**	**51.3**	**100.0**	**3 559**
Western Australia					
24 years and under	23.5	29.9	46.6	100.0	4 405
25 to 44 years	63.5	17.9	18.5	100.0	2 625
45 years and over	82.0	13.0	5.0	100.0	722
Total	**42.5**	**24.3**	**33.2**	**100.0**	**7 752**
Tasmania					
24 years and under	24.1	13.6	62.4	100.0	921
25 to 44 years	46.6	23.5	29.9	100.0	485
45 years and over	62.4	20.8	16.0	100.0	125
Total	**34.4**	**17.3**	**48.3**	**100.0**	**1 531**
Northern Territory					
24 years and under	34.2	15.9	50.2	100.0	295
25 to 44 years	49.6	22.7	27.7	100.0	260
45 years and over	52.6	26.3	23.7	100.0	38
Total	**42.2**	**19.4**	**38.4**	**100.0**	**593**

	Up to 2 years	Over 2 and up to 3 years	Over 3 years	Total	
	%	%	%	%	Number
Australian Capital Territory					
24 years and under	25.2	11.7	63.2	100.0	511
25 to 44 years	25.7	14.5	59.8	100.0	214
45 years and over	54.8	16.1	25.8	100.0	31
Total	**26.7**	**12.6**	**60.7**	**100.0**	**756**
Australia					
24 years and under	29.7	20.0	50.3	100.0	33 842
25 to 44 years	56.2	18.1	25.8	100.0	17 855
45 years and over	81.9	11.8	6.3	100.0	7 236
Total	**44.1**	**18.4**	**37.5**	**100.0**	**58 933**

Note: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).

Source: Derived from the National Apprentice and Trainee Collection, based on March 2014 estimates.

Table E2 Apprenticeship completions[1] at certificate III or higher and training duration up to two years by age group and training package, 12 months ending December 2013[2]

	24 years and under		25 years and over	
	Number	%	Number	%
MSA – Manufacturing (includes MCM)	135	1.3	4 161	26.1
RII – Resources and Infrastructure (includes BCC, DRT, MNC, MNM, MNQ)	279	2.8	1 731	10.8
HLT – Health	82	0.8	1 606	10.1
AHC – Agriculture, Horticulture and Conservation and Land Management (includes RTD, RTE, RTF, RUA, RUH)	392	3.9	806	5.1
CPC – Construction, Plumbing & Services Integrated Framework (includes BCF, BCG, BCP)	2 090	20.8	770	4.8
ICT – Integrated Telecommunications	267	2.7	744	4.7
MEM – Metal and Engineering Industry	629	6.3	733	4.6
MTM – Australian Meat Industry	341	3.4	730	4.6
MSL – Laboratory Operations (includes PML)	200	2.0	665	4.2
SIT – Tourism, Hospitality and Events (includes THH, THT)	1 063	10.6	607	3.8
MSS – Sustainability	41	0.4	592	3.7
AUR – Automotive Industry Retail, Service and Repair	884	8.8	550	3.4
UEE – Electrotechnology Industry (includes UTE, UTL)	722	7.2	519	3.3
BSB – Business Services (includes BSA)	42	0.4	437	2.7
PMA – Chemical, Hydrocarbons and Oil Refining	34	0.3	291	1.8
SIH – Hairdressing (includes WRH)	921	9.2	143	0.9
ICP – Printing and Graphic Arts	115	1.1	140	0.9
LMF – Furnishing Industry	151	1.5	137	0.9
ICA – Information and Communications Technology	703	7.0	136	0.9
FDF – Food Processing Industry	82	0.8	105	0.7
RGR – Racing Industry	88	0.9	64	0.4
FPI – Forest and Forest Products Industry	8	0.1	48	0.3
MEA – Aeroskills	15	0.1	38	0.2
UET – Transmission, Distribution and Rail (includes UTT)	6	0.1	38	0.2
AUM – Automotive Industry Manufacturing	15	0.1	34	0.2
ACM – Animal Care and Management (includes	84	0.8	23	0.1

	24 years and under		25 years and over	
	Number	%	Number	%
RUV)				
UEG – Gas Industry (includes UTG)	2	0.0	21	0.1
SFL – Floristry (includes WRF)	24	0.2	13	0.1
CPP – Property Services (includes PRD, PRM PRS)	1	0.0	11	0.1
CUL – Library, Information and Cultural Services	0	0.0	10	0.1
LMT – Textiles, Clothing and Footwear	8	0.1	10	0.1
THC – Caravan Industry	14	0.1	9	0.1
PMB – Plastics, Rubber and Cablemaking	0	0.0	8	0.1
CUE – Entertainment Industry	64	0.6	7	0.0
CUF – Screen and Media	533	5.3	4	0.0
UEP – Electricity Supply Industry – Generation Sector (includes UTP)	0	0.0	4	0.0
CUS – Music	3	0.0	2	0.0
NWP – Water Industry (includes UTW)	0	0.0	1	0.0
LGA – Local Government	2	0.0	0	0.0
Non-training package	12	0.1	6	0.0
Total	**10 053**	**100.0**	**15 956**	**100.0**

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).
2 Table sorted from highest to lowest based on the completions for the 25 years and over age group.

Source: Derived from the National Apprentice and Trainee Collection based on March 2014 estimates.

Table E3 Apprenticeship completions[1] at certificate III or higher and training duration up to two years by age group and employer size[2], 12 months ending December 2013[2]

	24 years and under		25 years and over	
	Number	%	Number	%
Small	5 278	52.5	5 070	31.8
Medium	1 163	11.6	3 079	19.3
Large	721	7.2	3 372	21.1
Not known	2 891	28.8	4 435	27.8
Total	**10 053**	**100.0**	**15 956**	**100.0**

Notes: 1 'Apprenticeships' refers to apprenticeships and traineeships in trades occupations under major group 3 (Technicians and trades workers).
2 There is a high proportion of not known information for the employer size data element. For this reason, caution should be taken when using these data.

Source: Derived from the National Apprentice and Trainee Collection based on March 2014 estimates.

Appendix F

Jurisdictional data

This appendix provides jurisdictional data from over the past five years on course enrolments by apprentices enrolled in the publicly funded VET system with at least one RPL-granted subject enrolment.

Table F1 Course enrolments by apprentices[1] with at least one RPL-granted subject outcome by state or territory, 2009–13

	2009	2010	2011	2012	2013		2012–13
	Number	Number	Number	Number	Number	%	% change
New South Wales							
24 years and under	1 477	1 414	1 522	1 793	3 999	75.7	123.0
25 years to 44 years	427	456	590	797	1 081	20.5	35.6
45 years and over	58	102	126	199	203	3.8	2.0
Total	**1 962**	**1 972**	**2 238**	**2 789**	**5 283**	**100.0**	**89.4**
Victoria							
24 years and under	638	675	985	806	666	36.5	-17.4
25 years to 44 years	306	451	695	731	778	42.6	6.4
45 years and over	70	133	230	257	382	20.9	48.6
Total	**1 014**	**1 259**	**1 910**	**1 794**	**1 826**	**100.0**	**1.8**
Queensland							
24 years and under	834	931	1 292	1 659	1 699	28.4	2.4
25 years to 44 years	814	879	1 608	2 019	3 245	54.2	60.7
45 years and over	150	168	430	632	1 047	17.5	65.7
Total[2]	**1 798**	**1 978**	**3 330**	**4 311**	**5 992**	**100.0**	**39.0**
South Australia							
24 years and under	236	287	280	314	299	55.7	-4.8
25 years to 44 years	197	216	249	263	191	35.6	-27.4
45 years and over	79	74	89	108	47	8.8	-56.5
Total[2]	**513**	**577**	**618**	**686**	**537**	**100.0**	**-21.7**
Western Australia							
24 years and under	211	229	227	313	319	29.6	1.9
25 years to 44 years	236	274	323	530	598	55.6	12.8
45 years and over	56	43	88	145	159	14.8	9.7
Total	**503**	**546**	**638**	**988**	**1 076**	**100.0**	**8.9**
Tasmania							
24 years and under	459	229	204	247	253	46.2	2.4
25 years to 44 years	295	230	174	210	239	43.6	13.8
45 years and over	54	71	46	37	56	10.2	51.4
Total	**808**	**530**	**424**	**494**	**548**	**100.0**	**10.9**
Northern Territory							
24 years and under	22	19	27	113	170	53.5	50.4
25 years to 44 years	12	26	30	63	139	43.7	120.6
45 years and over	4	5	6	4	9	2.8	125.0
Total[2]	**38**	**51**	**63**	**180**	**318**	**100.0**	**76.7**

	2009	2010	2011	2012	2013		2012–13
	Number	Number	Number	Number	Number	%	% change
Australian Capital Territory							
24 years and under	42	213	88	88	190	68.6	115.9
25 years to 44 years	19	47	46	42	78	28.2	85.7
45 years and over	5	3	2	7	9	3.2	28.6
Total[2]	**67**	**263**	**136**	**137**	**277**	**100.0**	**102.2**
Australia							
24 years and under	3 919	3 997	4 625	5 333	7 595	47.9	42.4
25 years to 44 years	2 306	2 579	3 715	4 655	6 349	40.0	36.4
45 years and over	476	599	1 017	1 389	1 912	12.1	37.7
Total[2]	**6 703**	**7 176**	**9 357**	**11 379**	**15 857**	**100.0**	**39.4**

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

2 Age not known is not separately identified in the table but is included in the total.

Source: National VET Provider Collection, 2009–13.

Appendix G

Detailed occupational data for apprentices with RPL activity

This appendix provides occupational data to identify whether shortened apprenticeships are being undertaken in occupations identified as a national skills shortage. Table G1 provides occupational data at the unit group level (four-digit ANZSCO) for course enrolments by apprentices with RPL activity. Table G2 provides occupational data at the unit group level (four-digit ANZSCO) for qualifications completed by apprentices with RPL. The trades occupations included in the National Skills List are provided at the end of this appendix.

Table G1 Course enrolments by apprentices[1] with at least one RPL-granted subject outcome by the course occupational area (ANZSCO group) and age group, 2013

		24 years and under		25 years to 44 years		45 years and over	
		Number	%	Number	%	Number	%
3110	Agricultural, Medical and Science Technicians – nfd	102	1.3	250	3.9	69	3.6
3112	Medical Technicians	1	0.0	5	0.1	7	0.4
3113	Primary Products Inspectors	3	0.0	10	0.2	2	0.1
3120	Building and Engineering Technicians – nfd	3	0.0	3	0.0	1	0.1
3121	Architectural, Building and Surveying Technicians	10	0.1	7	0.1	1	0.1
3122	Civil Engineering Draftspersons and Technicians	30	0.4	21	0.3	0	0.0
3123	Electrical Engineering Draftspersons and Technicians	1	0.0	0	0.0	0	0.0
3124	Electronic Engineering Draftspersons and Technicians	1	0.0	4	0.1	0	0.0
3125	Mechanical Engineering Draftspersons and Technicians	12	0.2	12	0.2	0	0.0
3126	Safety Inspectors	0	0.0	16	0.3	9	0.5
3129	Other Building and Engineering Technicians	195	2.6	855	13.5	413	21.6
3131	ICT Support Technicians	89	1.2	14	0.2	3	0.2
3132	Telecommunications Technical Specialists	3	0.0	1	0.0	0	0.0
3211	Automotive Electricians	46	0.6	41	0.6	5	0.3
3212	Motor Mechanics	479	6.3	463	7.3	81	4.2
3220	Fabrication Engineering Trades Workers – nfd	1	0.0	34	0.5	36	1.9
3221	Metal Casting, Forging and Finishing Trades Workers	1	0.0	1	0.0	0	0.0
3222	Sheetmetal Trades Workers	82	1.1	215	3.4	78	4.1
3223	Structural Steel and Welding Trades Workers	2	0.0	5	0.1	0	0.0
3230	Mechanical Engineering Trades Workers – nfd	170	2.2	409	6.4	140	7.3
3231	Aircraft Maintenance Engineers	15	0.2	7	0.1	0	0.0
3233	Precision Metal Trades Workers	10	0.1	8	0.1	1	0.1
3241	Panelbeaters	3	0.0	0	0.0	0	0.0
3242	Vehicle Body Builders and Trimmers	193	2.5	109	1.7	21	1.1
3243	Vehicle Painters	1	0.0	1	0.0	0	0.0
3300	Construction Trades Workers – nfd	6	0.1	7	0.1	1	0.1
3311	Bricklayers and Stonemasons	112	1.5	52	0.8	10	0.5
3312	Carpenters and Joiners	1 345	17.7	302	4.8	30	1.6
3321	Floor Finishers	3	0.0	2	0.0	0	0.0
3322	Painting Trades Workers	77	1.0	52	0.8	11	0.6
3331	Glaziers	105	1.4	79	1.2	13	0.7

		24 years and under		25 years to 44 years		45 years and over	
		Number	%	Number	%	Number	%
3332	Plasterers	70	0.9	18	0.3	3	0.2
3333	Roof Tilers	3	0.0	1	0.0	0	0.0
3334	Wall and Floor Tilers	70	0.9	28	0.4	8	0.4
3341	Plumbers	912	12.0	250	3.9	15	0.8
3400	Electrotechnology and Telecommunications Trades Workers – nfd	5	0.1	6	0.1	3	0.2
3411	Electricians	1 221	16.1	600	9.5	55	2.9
3421	Airconditioning and Refrigeration Mechanics	195	2.6	73	1.1	11	0.6
3422	Electrical Distribution Trades Workers	88	1.2	126	2.0	5	0.3
3423	Electronics Trades Workers	49	0.6	76	1.2	30	1.6
3424	Telecommunications Trades Workers	107	1.4	367	5.8	120	6.3
3510	Food Trades Workers – nfd	0	0.0	0	0.0	1	0.1
3511	Bakers and Pastrycooks	61	0.8	48	0.8	8	0.4
3512	Butchers and Smallgoods Makers	111	1.5	49	0.8	7	0.4
3513	Chefs	0	0.0	2	0.0	1	0.1
3514	Cooks	460	6.1	430	6.8	152	7.9
3611	Animal Attendants and Trainers	16	0.2	14	0.2	3	0.2
3612	Shearers	1	0.0	0	0.0	0	0.0
3613	Veterinary Nurses	14	0.2	6	0.1	1	0.1
3621	Florists	7	0.1	0	0.0	0	0.0
3622	Gardeners	131	1.7	266	4.2	97	5.1
3623	Greenkeepers	33	0.4	8	0.1	3	0.2
3624	Nurserypersons	2	0.0	0	0.0	0	0.0
3911	Hairdressers	745	9.8	116	1.8	10	0.5
3921	Binders, Finishers and Screen Printers	26	0.3	236	3.7	162	8.5
3922	Graphic Pre-press Trades Workers	9	0.1	4	0.1	0	0.0
3923	Printers	22	0.3	209	3.3	121	6.3
3931	Canvas and Leather Goods Makers	0	0.0	2	0.0	1	0.1
3933	Upholsterers	1	0.0	0	0.0	0	0.0
3941	Cabinetmakers	33	0.4	24	0.4	3	0.2
3942	Wood Machinists and Other Wood Trades Workers	6	0.1	12	0.2	6	0.3
3990	Miscellaneous Technicians and Trades Workers – nfd	10	0.1	73	1.1	36	1.9
3991	Boat Builders and Shipwrights	1	0.0	2	0.0	1	0.1
3992	Chemical, Gas, Petroleum and Power Generation Plant Operators	1	0.0	13	0.2	3	0.2
3993	Gallery, Library and Museum Technicians	0	0.0	4	0.1	3	0.2
3994	Jewellers	4	0.1	5	0.1	0	0.0
3995	Performing Arts Technicians	5	0.1	0	0.0	0	0.0
3996	Signwriters	26	0.3	21	0.3	4	0.2
3999	Other Miscellaneous Technicians and Trades Workers	49	0.6	275	4.3	107	5.6
Total		**7 595**	**100.0**	**6 349**	**100.0**	**1 912**	**100.0**

Note: 1 The National VET Provider Collection does not separate apprentices from trainees. For this reason, the apprentice flag and the occupation assigned to the course were used to identify apprentices, based on ANZSCO group 3 (Technicians and trades workers).

Source: National VET Provider Collection, 2013.

Table G2 Apprentices[1] who commenced a VET course in 2012 and either completed the course in 2012 or 2013 via the RPL pathway[2] by the course occupational area (ANZSCO group) and age group

		24 years and under		25 to 44 years		45 years and over	
		Number	%	Number	%	Number	%
3110	Agricultural, Medical and Science Technicians – nfd	49	3.2	154	9.6	38	8.1
3111	Agricultural Technicians	0	0.0	1	0.1	0	0.0
3112	Medical Technicians	4	0.3	3	0.2	5	1.1
3113	Primary Products Inspectors	0	0.0	11	0.7	2	0.4
3120	Building and Engineering Technicians – nfd	1	0.1	0	0.0	0	0.0
3121	Architectural, Building and Surveying Technicians	1	0.1	0	0.0	0	0.0
3122	Civil Engineering Draftspersons and Technicians	4	0.3	7	0.4	0	0.0
3124	Electronic Engineering Draftspersons and Technicians	1	0.1	0	0.0	0	0.0
3125	Mechanical Engineering Draftspersons and Technicians	2	0.1	2	0.1	0	0.0
3126	Safety Inspectors	0	0.0	8	0.5	13	2.8
3129	Other Building and Engineering Technicians	51	3.3	219	13.7	129	27.4
3131	ICT Support Technicians	38	2.5	6	0.4	1	0.2
3211	Automotive Electricians	8	0.5	21	1.3	0	0.0
3212	Motor Mechanics	122	7.9	145	9.1	45	9.6
3222	Sheetmetal Trades Workers	17	1.1	77	4.8	25	5.3
3223	Structural Steel and Welding Trades Workers	0	0.0	1	0.1	0	0.0
3230	Mechanical Engineering Trades Workers – nfd	25	1.6	68	4.2	13	2.8
3231	Aircraft Maintenance Engineers	0	0.0	3	0.2	0	0.0
3233	Precision Metal Trades Workers	1	0.1	3	0.2	0	0.0
3242	Vehicle Body Builders and Trimmers	52	3.4	55	3.4	16	3.4
3300	Construction Trades Workers – nfd	1	0.1	1	0.1	0	0.0
3311	Bricklayers and Stonemasons	10	0.7	8	0.5	0	0.0
3312	Carpenters and Joiners	376	24.5	93	5.8	8	1.7
3321	Floor Finishers	0	0.0	3	0.2	0	0.0
3322	Painting Trades Workers	29	1.9	27	1.7	8	1.7
3331	Glaziers	5	0.3	24	1.5	6	1.3
3332	Plasterers	7	0.5	13	0.8	1	0.2
3334	Wall and Floor Tilers	11	0.7	1	0.1	0	0.0
3341	Plumbers	154	10.0	71	4.4	10	2.1
3400	Electrotechnology and Telecommunications Trades Workers – nfd	1	0.1	3	0.2	3	0.6
3411	Electricians	78	5.1	70	4.4	3	0.6
3421	Airconditioning and Refrigeration Mechanics	7	0.5	5	0.3	0	0.0
3422	Electrical Distribution Trades Workers	0	0.0	10	0.6	1	0.2
3423	Electronics Trades Workers	10	0.7	17	1.1	4	0.8
3424	Telecommunications Trades Workers	17	1.1	17	1.1	3	0.6
3511	Bakers and Pastrycooks	10	0.7	24	1.5	2	0.4
3512	Butchers and Smallgoods Makers	23	1.5	19	1.2	5	1.1
3514	Cooks	108	7.0	134	8.4	29	6.2
3611	Animal Attendants and Trainers	13	0.8	17	1.1	4	0.8
3613	Veterinary Nurses	3	0.2	3	0.2	1	0.2
3621	Florists	3	0.2	1	0.1	0	0.0
3622	Gardeners	31	2.0	125	7.8	53	11.3
3623	Greenkeepers	2	0.1	2	0.1	0	0.0
3624	Nurserypersons	1	0.1	1	0.1	1	0.2
3911	Hairdressers	218	14.2	36	2.2	2	0.4
3921	Binders, Finishers and Screen Printers	0	0.0	1	0.1	1	0.2

		24 years and under		25 to 44 years		45 years and over	
		Number	%	Number	%	Number	%
3922	Graphic Pre-press Trades Workers	2	0.1	1	0.1	0	0.0
3923	Printers	1	0.1	6	0.4	2	0.4
3931	Canvas and Leather Goods Makers	0	0.0	1	0.1	1	0.2
3941	Cabinetmakers	11	0.7	11	0.7	1	0.2
3942	Wood Machinists and Other Wood Trades Workers	1	0.1	6	0.4	2	0.4
3990	Miscellaneous Technicians and Trades Workers – nfd	9	0.6	27	1.7	4	0.8
3991	Boat Builders and Shipwrights	1	0.1	0	0.0	0	0.0
3992	Chemical, Gas, Petroleum and Power Generation Plant Operators	4	0.3	12	0.7	1	0.2
3994	Jewellers	2	0.1	2	0.1	0	0.0
3995	Performing Arts Technicians	6	0.4	0	0.0	0	0.0
3996	Signwriters	0	0.0	4	0.2	0	0.0
3999	Other Miscellaneous Technicians and Trades Workers	4	0.3	22	1.4	28	5.9
Total		**1 535**	**100.0**	**1 602**	**100.0**	**471**	**100.0**

Notes: 1 The National VET Provider Collection does not identify apprentices separately from trainees. For this reason, the occupation assigned to the course as the most likely occupational outcome was used to identify apprentices. This was based on trades occupations under major group 3 (Technicians and trades workers), using ANZSCO.

2 'The RPL pathway' includes courses that were completed whereby at least one subject had an outcome of RPL granted.

Source: National VET Provider Collection, 2012–13.

National Skills Needs List

As at July 2014 the trades included on the National Skills Needs List (NSNL) are listed in the following table. This list is updated regularly; refer to <http://www.australianapprenticeships.gov.au/national-skills-needs-list> for updated information.

Airconditioning and Mechanical Services Plumber	Airconditioning and Refrigeration Mechanic	Aircraft Maintenance Engineer (Avionics)
Aircraft Maintenance Engineer (Mechanical)	Arborist	Automotive Electrician
Baker	Boat Builder and Repairer	Bricklayer
Butcher or Smallgoods Maker	Cabinetmaker	Carpenter
Carpenter and Joiner	Cook	Diesel Motor Mechanic
Drainer	Electrical Linesworker	Electrician (General)
Electrician (special class)	Electronic Equipment Trades Worker	Fibrous Plasterer
Fitter (General)	Fitter and Turner	Fitter-Welder
Floor Finisher	Furniture Finisher	Gasfitter
Glazier	Hairdresser	Joiner
Landscape Gardener	Lift Mechanic	Locksmith
Metal Fabricator	Metal Machinist (First class)	Motor Mechanics (General)
Motorcycle Mechanic	Optical Mechanic	Painting Trades Worker
Panelbeater	Pastrycook	Picture Framer
Plumber (General)	Pressure Welder	Print Finisher
Printing Machinist	Roof Plumber	Roof Tiler
Screen Printer	Shearer	Sheetmetal Trades Worker

Signwriter	Small Engine Mechanic	Solid Plasterer
Stonemason	Telecommunications Linesworker	Telecommunications Technician
Toolmaker	Upholsterer	Vehicle Body Builder
Vehicle Painter	Vehicle Trimmer	Wall and Floor Tiler
Welder (First class)	Wood Machinist	

Appendix H

NAP case study: detailed tables on program demand

This appendix provides data on the preferred trade of NAP applicants by the state or territory of applicants.

Table H1 NAP applicants[1] by preferred trade and state or territory of applicant, 2011–14[2]

	2011[2]	2012	2013	2014[2]	% of total applicants
New South Wales					
Boilermaker/Welder	35	69	62	5	19.5
Carpenter/Form worker	33	63	20	5	13.8
Diesel Fitter	34	91	37	4	18.9
Dual Trade Instrumentation	14	56	33	5	12.3
Electrical Fitter/Mechanic	49	84	48	6	21.3
Mechanical Fitter	4	58	53	8	14.0
Lineworker	0	0	0	0	0.0
Plumber	0	0	0	1	0.1
Total	**169**	**421**	**253**	**34**	**100.0**
Victoria					
Boilermaker/Welder	27	43	20	0	13.2
Carpenter/Form worker	11	50	17	3	11.9
Diesel Fitter	30	51	21	9	16.3
Dual Trade Instrumentation	8	52	25	6	13.4
Electrical Fitter/Mechanic	40	67	40	8	22.8
Mechanical Fitter	2	38	22	4	9.7
Lineworker	0	0	86	0	12.6
Plumber	0	0	1	0	0.1
Total	**118**	**301**	**232**	**30**	**100.0**
Queensland					
Boilermaker/Welder	435	406	450	33	20.4
Carpenter/Form worker	335	386	203	24	14.6
Diesel Fitter	521	514	278	29	20.6
Dual Trade Instrumentation	99	247	193	18	8.6
Electrical Fitter/Mechanic	556	503	429	54	23.7
Mechanical Fitter	96	323	336	20	11.9
Lineworker	0	0	1	0	0.0
Plumber	0	0	4	11	0.2
Total	**2 042**	**2 379**	**1 894**	**189**	**100.0**
South Australia					
Boilermaker/Welder	21	24	12	1	17.7
Carpenter/Form worker	5	25	2	1	10.1
Diesel Fitter	17	36	21	1	22.9
Dual Trade Instrumentation	1	24	10	3	11.6
Electrical Fitter/Mechanic	19	35	14	5	22.3
Mechanical Fitter	1	31	16	3	15.5
Lineworker	0	0	0	0	0.0
Plumber	0	0	0	0	0.0
Total	**64**	**175**	**75**	**14**	**100.0**
Western Australia					
Boilermaker/Welder	36	95	28	4	16.9
Carpenter/Form worker	26	81	19	5	13.5

	2011[2]	2012	2013	2014[2]	% of total applicants
Diesel Fitter	43	145	33	7	23.6
Dual Trade Instrumentation	8	56	17	2	8.6
Electrical Fitter/Mechanic	43	118	38	5	21.1
Mechanical Fitter	8	122	21	7	16.3
Lineworker	0	0	0	0	0.0
Plumber	0	0	0	0	0.0
Total	**164**	**617**	**156**	**30**	**100.0**
Tasmania					
Boilermaker/Welder	4	65	18	0	24.5
Carpenter/Form worker	1	62	10	1	20.8
Diesel Fitter	5	51	11	0	18.9
Dual Trade Instrumentation	1	21	2	0	6.8
Electrical Fitter/Mechanic	8	42	2	2	15.2
Mechanical Fitter	0	41	8	0	13.8
Lineworker	0	0	0	0	0.0
Plumber	0	0	0	0	0.0
Total	**19**	**282**	**51**	**3**	**100.0**
Northern Territory					
Boilermaker/Welder	0	6	1	0	9.2
Carpenter/Form worker	0	2	0	0	2.6
Diesel Fitter	5	14	4	0	30.3
Dual Trade Instrumentation	0	9	3	0	15.8
Electrical Fitter/Mechanic	6	17	3	0	34.2
Mechanical Fitter	0	5	1	0	7.9
Lineworker	0	0	0	0	0.0
Plumber	0	0	0	0	0.0
Total	**11**	**53**	**12**	**0**	**100.0**
Australian Capital Territory					
Boilermaker/Welder	2	0	6	0	34.8
Carpenter/Form worker	0	1	2	1	17.4
Diesel Fitter	1	0	3	0	17.4
Dual Trade Instrumentation	0	1	1	0	8.7
Electrical Fitter/Mechanic	0	1	2	0	13.0
Mechanical Fitter	0	1	1	0	8.7
Lineworker	0	0	0	0	0.0
Plumber	0	0	0	0	0.0
Total	**3**	**4**	**15**	**1**	**100.0**
Australia					
Boilermaker/Welder	560	708	597	43	19.4
Carpenter/Form worker	411	670	273	40	14.2
Diesel Fitter	656	902	408	50	20.5
Dual Trade Instrumentation	131	466	284	34	9.3
Electrical Fitter/Mechanic	721	867	576	80	22.9
Mechanical Fitter	111	619	458	42	12.5
Lineworker	0	0	87	0	0.9
Plumber	0	0	5	12	0.2
Total[3]	**2 590**	**4 232**	**2 688**	**301**	**100.0**

Notes: 1 'NAP applicants' refers to the number of online applications received for the NAP program. Some, but not all, of these applicants proceeded to the 100-day selection process.

2 The 2011 and 2014 data may not be comparable with data from other years as 2011 data were based on NAP participants from 17 March 2011, and 2014 data were based on NAP participants from 1 January 2014 to 30 April 2014. As a result, the 2011 and 2014 data are not based on full calendar years.

3 The total excludes one applicant from New Zealand.

Source: Derived from East Coast Apprenticeships NAP database.

Appendix I

Apprentice outline of CBWP and CBTP across states and territories (from Dunn et al. 2011)

Jurisdiction	Competency-based wage progression	Competency-based training progression
National	Yes. However, CBWP is only (explicitly) available to those covered by the: Manufacturing and Associated Industries and Occupations Award 2010 (cl. 15.6); Vehicle Manufacturing, Repair, Services and Retail Award 2010 (cl. 35.1 and cl. 49); Graphic Arts, Printing and Publishing Award 2010 (only in relation to adult apprentices, cl. 20.3) Building and Construction General On-site Award 2010 provides for progression through the wage structure based on achievement of competency in accordance with the terms of a NAPSA or an award made under the Workplace Relations Act 1996 (Cth) cl. 19.7(c), which sunsets on 31 December 2014. Three more modern awards, the Food, Beverage and Tobacco Manufacturing Award 2010 (cl. 21.1), Higher Education Industry – General Staff – Award 2010 I (item G.4) and the Sugar Industry Award 2010 (cl. 40.4) outlined that apprenticeships can progress in 'stages', though is not explicit on how progression occurs. Addendum: In August 2013 the Fair Work Commission announced that minimum award rates for adult apprentices will be increased, in recognition of the growing proportion of apprentices who are aged over 21 years (for apprentices commencing after 1 January 2014): ▪ the rate of pay for a first-year adult apprentice will be 80% of the C10 (classification level) award rate, while a second year adult apprentice will receive the higher of the national minimum wage or the lowest adult classification rate in the award) ▪ an employee who has worked full-time for an employer for at least six months, or for 12 months as a part-time or casual employee before commencing an adult apprenticeship with the same employer will not suffer a reduction in their minimum rate of pay. Special provisions should be made in relation to rates of pay and wage protection for adult apprentices – adult apprentice rates will be introduced into a number of awards which do not currently contain them Provision should be made for competency-based wage progression to be introduced into several modern awards and for consideration to be given to its introduction into other modern awards, where application (by unions) has been made; a model clause should be developed to facilitate the introduction of CBWP into other awards.	CBTP in the national system is facilitated by the legislation of the particular state or territory in which an employee is covered

Vic.	Vic. has now made a full referral of powers; however, some Victorians who are still covered by some award-based transitional instruments after the commencement of modern awards (such as those covered by Division 2A state reference transitional awards) may not have CBWP coverage.	Yes. Section 5.5.14 of the *Education and Training Reform Act 2006* (Vic.) allows for early or late completion, depending on the knowledge and skills of the apprentice, as required under the training contract.
Qld	Yes, for most apprentices covered by the Qld jurisdiction CBWP is available. The Qld jurisdiction has two orders (made by the QIRC) which provide a default entitlement to CBWP. These are the Order – Apprentices' and Trainees' Wages and Conditions (excluding certain Queensland Government Entities) 2003 (for private sector employees) and the Order – Apprentices' and Trainees', Wages and Conditions (Queensland Government Departments and Certain Government Entities) for government sector employees. Both orders, however, do exclude their ability to provide CBWP to some industries such as ▪ plumbers other than sprinkler pipe fitting apprentices (Schedule 4, cl 4) ▪ bread baking and pastry cook apprentices (Schedule 8, cl 2.1.1) ▪ electrotechnology industry apprentices (Schedule 22, cl 2.1) ▪ electricity supply tradespersons (Schedule 22, cl 4.3.2) ▪ funeral services (Schedule 23, cl 3.1 and 2.1.5). The following Qld state awards also provide for CBWP: Hairdressers' Industry Award – State 2003 Rubber and Plastic Industry Award – State 2003	Yes. Sections 49 of the *Vocational Education, Training and Employment Act 2000* (Qld) allows the council to decide on the duration (nominal term) of a training contract, and allows for the nominal term of an apprenticeship to be different depending on the class of apprenticeship. S. 74 states that an apprenticeship is complete when a supervising RTO, an employer and the employer's apprentice sign a completion agreement.
SA	CBWP is not available to apprentices covered by the SA industrial relations system. For South Australian employees covered by the national system see the information in the national system row.	Yes. Section 49(5) of the *Training and Skills Development Act 2008* (SA) provides that the Commission *may* certify that an apprentice has completed early if satisfied of the competency of the apprentice.
NSW	CBWP is not available to apprentices covered by the NSW industrial relations system. For employees in NSW covered by the national system see the information in the national system row.	Yes. Section 10(2) of the *Apprenticeship and Traineeship Act 2001* (NSW) allows for early or late completion, by providing that the Commissioner or Tribunal may reduce or extend the term of the apprenticeship.
Tas.	CBWP is not available to apprentices covered by the Tasmanian industrial relations system. For Tasmanian employees covered by the national system, see the information in the national system row.	Yes. Section 40 of the *Vocational Education and Training Act 1994* (Tas.) allows for early or late completion by allowing the Tasmanian Training Agreements Committee to amend or approve amendment of a training contract.
NT	Section 66 of the *Northern Territory Employment and Training Act 1991* (NT) provides that the Employment and Training Authority is to set wages based on the level of competence of apprentices. This is subject to any term of an award made under the *Workplace Relations Act 1996* (Cth). The *Workplace Relations Act 1996* (Cth) has since been repealed, and NT apprentices are covered by national awards.	Yes. Section 63(3) of the *Northern Territory Employment and Training Act 1991* (NT) provides that an RTO *must* award the qualification as soon as reasonably practicable after an apprentice is assessed as being eligible to be awarded a qualification for attaining the level of competency or skill specified in the training agreement.
ACT	ACT apprentices are covered by the national system.	Yes. Section 55G of the *Training and Tertiary Education Act 2003* (ACT) allows for amendment of the training contract between parties with the approval of the chief executive.
WA	CBWP is not available to apprentices covered by the WA industrial relations system. For Western Australian employees covered by the national system see the information in the national system row.	Yes. Section 60I of the *Vocational Education and Training Act 1996* (WA) provides that a registered training provider *may* confer a qualification where, upon assessment of the person, the provider is satisfied that the person has the skills and competency required for the qualification.

Appendix J

Analysis of ‘competency-based wage progression’ appearing in awards containing apprentice conditions

Contains the term competency-based wage progression

Airline Operations — Ground Staff Award 2010 (MA000048)

Building and Construction General On-site Award 2010 (MA000020)

Graphic Arts, Printing and Publishing Award 2010 (MA000026)

Joinery and Building Trades Award 2010 (MA000029)

Manufacturing and Associated Industries and Occupations Award 2010 (MA000010)

Sugar Industry Award 2010 (MA000087)

Contains the term competency-based progression

Airport Employees Award 2010 (MA000049)

Alpine Resorts Award 2010 (MA000092)

Aluminium Industry Award 2010 (MA000060)

Amusement, Events and Recreation Award 2010 (MA000080)

Black Coal Mining Industry Award 2010 (MA000001)

Cemetery Industry Award 2010 (MA000070)

Children's Services Award 2010 (MA000120)

Coal Export Terminals Award 2010 (MA000045)

Dry Cleaning and Laundry Industry Award 2010 (MA000096)

Educational Services (Schools) General Staff Award 2010 (MA000076)

Electrical, Electronic and Communications Contracting Award 2010 (MA000025)

Electrical Power Industry Award 2010 (MA000088)

Food, Beverage and Tobacco Manufacturing Award 2010 (MA000073)

Gardening and Landscaping Services Award 2010 (MA000101)

Gas Industry Award 2010 (MA000061)

General Retail Industry Award 2010 (MA000004)

Hair and Beauty Industry Award 2010 (MA000005)

Higher Education Industry — General Staff — Award 2010 (MA000007)

Hospitality Industry (General) Award 2010 (MA000009)

Hydrocarbons Industry (Upstream) Award 2010 (MA000062)

Local Government Industry Award 2010 (MA000112)

Meat Industry Award 2010 (MA000059)

Mining Industry Award 2010 (MA000011)

Miscellaneous Award 2010 (MA000104)

Nursery Award 2010 (MA000033)

Oil Refining and Manufacturing Award 2010 (MA000072)

Port Authorities Award 2010 (MA000051)

Racing Industry Ground Maintenance Award 2010 (MA000014)

Rail Industry Award 2010 (MA000015)

Registered and Licensed Clubs Award 2010 (MA000058)

Restaurant Industry Award 2010 (MA000119)

Salt Industry Award 2010 (MA000107)

Stevedoring Industry Award 2010 (MA000053)

Telecommunications Services Award 2010 (MA000041)

Textile, Clothing, Footwear and Associated Industries Award 2010 (MA000017)

Timber Industry Award 2010 (MA000071)

Vehicle Manufacturing, Repair, Services and Retail Award 2010 (MA000089)

Water Industry Award 2010 (MA000113)

Wine Industry Award 2010 (MA000090)

Does not contain either competency-based wage progression or competency-based progression

Plumbing and Fire Sprinklers Award 2010 (MA000036)

NVETR Program funding

The National Vocational Education and Training Research (NVETR) Program is coordinated and managed by NCVER on behalf of the Australian Government and state and territory governments. Funding is provided through the Australian Government Department of Education and Training.

The NVETR Program is based on national research priorities and aims to improve policy and practice in the VET sector. The research effort itself is collaborative and requires strong relationships with the research community in Australia's universities and beyond. NCVER may also involve various stakeholders, including state and territory governments, industry and practitioners, to inform the commissioned research, and use a variety of mechanisms such as project roundtables and forums.

Research grants are awarded to organisations through a competitive process, in which NCVER does not participate. To ensure the quality and relevance of the research, projects are selected using an independent and transparent process and research reports are peer-reviewed.

From 2012 some of the NVETR Program funding was made available for research and policy advice to National Senior Officials of the then Standing Council for Tertiary Education, Skills and Employment (SCOTESE) Principal Committees. They were responsible for determining suitable and relevant research projects aligned to the immediate priority needs in support of the national VET reform agenda.

For further information about the program go to the NCVER Portal <http://www.ncver.edu.au>.

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