

The Australian Industry Group

Making Apprenticeships Work

April 2016



AiGROUP

The Australian Industry Group

Making Apprenticeships Work

April 2016

About Ai Group

The Australian Industry Group (Ai Group) is Australia's peak industry association. Acting on behalf of business for more than 140 years, we are the country's only truly national employers' organisation.

Ai Group represents the interests of more than 60,000 businesses employing more than 1 million staff. Our longstanding involvement with diverse industry sectors including manufacturing, construction, transport, labour hire, mining services, defence, airlines and ICT means we are genuinely representative of Australian industry.

With more than 250 staff in offices across NSW, QLD, SA, VIC and WA, we have the resources and the expertise to meet the changing needs of our members. We provide the practical information, advice and assistance you need to run your business more effectively.

Ai Group also offers members a voice at all levels of government through our policy leadership and influence. Our deep experience of industrial relations and workplace law positions Ai Group as the leading advocate on behalf of enterprises large and small across Australia.

We intrinsically appreciate the challenges facing industry and remain at the cutting edge of policy debate and legislative change – and strategic business management.

Workforce Development

THE AUSTRALIAN INDUSTRY GROUP

Direct Telephone: 03 9867 0202

Email: educationtraining@aigroup.com.au

Executive Summary



The Australian Industry Group is a strong advocate for the advancement of Australian Apprenticeships as a key component of skilling the workforce. This work-based skilling pathway is well understood and supported by employers but is currently experiencing significant difficulties.

The numbers of apprentices and trainees in training and the number of commencements are the lowest for a decade. Completions of Australian Apprenticeships continue to remain at unacceptably low levels. Our young people are not embracing these arrangements. Pre-apprenticeships and

School-based Apprenticeships are both under-utilised at a time when it is taking increasingly longer for young people to find employment.

The growth sectors in the economy and subsequent employment patterns are in areas not traditionally served by apprenticeships. There is a challenge to expand and spread the benefits of this work-based learning model to new and different industries.

Many of the current arrangements lack national consistency and are unnecessarily complicated for key players including employers and the apprentices themselves. Competency based progression and completion is not systematically implemented.

Employers have told us that they are cautious about expanding their workforces through apprenticeships in the current climate.

It is important to act and act now. We have a comprehensive range of recommendations to address this rapidly deteriorating situation.

Employer incentives are required to support employers not yet engaged in apprenticeship arrangements. This should include incentives for those supporting STEM-related apprenticeships which are increasingly important for the economy.

To assist in the expansion of the program the Joint Group Training Program funding needs to be reinstated. This will assist employers new to the program, small-medium enterprises and completion rates.

There is value in investigating other approaches such as combining high-level qualifications from both the VET and Higher Education sectors with the apprenticeship pathway. Such approaches have the potential to reach a wider cohort of participants and extend the model to other industry areas.

We need a national communications strategy to spread the benefits of competency based progression and completion like those achieved in our Engineering Excellence project. Registered Training Organisations need to take measures to address this issue.

We need to encourage our young people into Australian Apprenticeships by supporting pre-apprenticeship and School-based Apprenticeship programs.

Overall we need a discrete industry-led body to manage the policy and implementation of Australian Apprenticeships. For too long we have had to deal with many inconsistent practices across the jurisdictions and unnecessarily complicated arrangements. These barriers need to be swept away to enable employers to engage successfully with the program.

Innes Willox

A handwritten signature in black ink that reads "Innes Willox". The signature is written in a cursive style and is positioned above a horizontal line.

Chief Executive
Australian Industry Group

Key Points

- Australian Apprenticeships remain a major training pathway providing work-based learning for the benefit of individual participants, employers and the Australian economy.
- Australian Apprenticeship commencements and those in-training are the lowest for a decade and in need of urgent support.
- Australian Apprenticeship completions remain at unacceptably low levels.
- The Australian economy is growing most in industry and employment areas that traditionally do not utilise apprenticeship pathways.
- There are significant issues of national inconsistency and complexity associated with Australian Apprenticeships.
- Despite being national policy there is not system-wide implementation of competency based progression and completion.
- Apprenticeships pathways including pre-apprenticeships and School-based Apprenticeships are under-utilised.
- Employers are not planning to significantly increase the number of apprentices and trainees given current business conditions and difficulties with the system.
- Employer incentives are needed to support employers not currently engaged in Australian Apprenticeships and for STEM-related industry areas.
- The effect of mentoring and other services provided through the Australian Apprenticeships Support Network on completions needs to be carefully monitored.
- The linking of Australian Apprenticeships to high-level VET and higher education qualifications must be investigated and piloted.
- The expansion of the apprenticeship model into a wider range of industries including para-professional occupations needs to be investigated and piloted.
- Measures need to be adopted to implement competency based progression and completion on a national basis.
- A national industry-led body needs to be established to drive national policy and address implementation issues to achieve national consistency.
- The role of pre-apprenticeships needs to be more clearly defined and supported.

Recommendations

Incentives

1. Implement employer incentives for those employers not currently engaged with Australian Apprenticeships to address the significant decline in commencements.
2. Introduce employer incentives for STEM-related Australian Apprenticeships to help address the shortage in this key area of the economy.

Support New Employers and Completions

3. Group Training is the largest employer of apprentices in Australia, however it is currently experiencing significant viability issues. There is a need to reinstate Joint Group Training Program funding to GTOs and focus this funding on supporting first-time employers of apprentices, especially small-to-medium enterprises, to improve completions of Australian Apprenticeships.
4. Utilise GTOs to deepen engagement between young people and workplaces through work experience and careers guidance programs.

Higher Level Qualifications

5. Investigate and trial a range of measures that link apprenticeships to higher-level qualifications in the VET and Higher Education sectors to attract a more diverse cohort to Australian Apprenticeships and extend the value of an employment-based pathway to more industries.

Extend the Range of Occupations

6. Investigate the potential of introducing and trialling 'higher apprenticeships' models which provide this pathway to a wider range of industries and occupations including para-professional employment.

Competency Based Progression and Completion

7. Develop and implement a national communication strategy to develop mechanisms to facilitate Registered Training Organisations to promote the outcomes from the Engineering Excellence Report and to raise their capability to implement competency based progression and completion for their apprentices.

National Consistency

8. Establish a national industry-led oversighting body to drive national Australian Apprenticeships policy, to achieve national consistency, to reduce unnecessary complexity and to ensure that programs and arrangements meet the current and emerging occupational needs of the economy.

Pathways to Apprenticeships

9. Clearly define and support pre-apprenticeship programs to more effectively engage young people and strengthen the pathway to Australian Apprenticeships.
10. Develop measures to support School-based Apprenticeships as a key platform in the expansion of Australian Apprenticeships to young people.

Why are apprenticeships important?

Apprenticeships are the backbone in the formation of highly valued and adaptable skilled tradespeople Australia needs for its future. Where apprenticeship systems are practised they have a significant impact on the economy.

International research has detailed this contribution. A report by the Centre for Economics and Business Research finds that apprenticeships could contribute £3.4 billion to the UK economy by 2022. The report, *Productivity Matters: The Impact of Apprenticeships on the UK Economy*, found that gaining an apprenticeship raised an employee's gross productivity by £214 per week on average, by boosting their skills. The biggest productivity gains were found in the engineering and manufacturing, construction and planning, and business, administration and legal sectors.¹ A Swiss study found that employers in their country earn a net \$300 million each year from the work apprentices do while training on the job. In Canada, a 2009 study showed that for every \$1 invested in apprenticeship programs, Canadian employers of all sizes and in every province can expect to receive \$1.47 in return.²

In Australia the focus has been on the importance of apprenticeships in skill formation and job readiness for individuals and the contribution to the skilled labour pool collective.³ The NCVER has reported that 84.1 per cent of graduates who undertook an apprenticeship or traineeship were employed after training. For those who undertook a trade apprenticeship the result was 90.6 per cent. In addition to these employment outcomes graduates earned \$51,100 per year on average and 88.5 per cent were satisfied with the overall quality of the training.⁴

¹ <http://www.bitc.org.uk/news-events/news/cebr-report-finds-apprenticeships-adding-value-uk-economy#sthash.XSjg2CYh.dpuf>.

² Sarah Ayres Steinburg, *The Bottom Line: Apprenticeships are good for business*, Center for American Progress, 14 July 2014.

³ Tom Karmel and John Rice, *The economics of apprenticeships and traineeships*, NCVER, Commonwealth Government, 2011.

⁴ *Government-funded student outcomes 2015*, NCVER, 2015.

Benefits of Australian Apprenticeships

Build a pipeline of skilled workers

Employers view apprenticeships and traineeships as an integral component of their workforce recruitment strategy to build productivity. Employers train the person within their work environment in areas where skills are required. Apprenticeships are an effective tool to build their workforce talent.

Gain workers with customised skills

Through apprenticeships, businesses have the opportunity to train workers to meet their specific requirements. In addition, European research indicates that apprenticeship training is transferable across companies, especially where the companies are large and invest more in training.⁵

A catalyst for rethinking systems and processes

Employers have reported that training an apprentice or trainee often encourages staff to rethink and challenge existing work practices. Productivity improvements can be a consequence of employing an apprentice or trainee. Moreover, a significant majority of apprenticeship employers report that apprenticeships raise productivity and worker morale across the board – not just among apprentices. This is because all workers benefit from a learning environment at work.

Contributing to their community

School-based apprenticeships or traineeships can make a real difference in motivating young people to complete school and work towards their future goal. Pre-apprenticeship programs, for example, develop core skills and enable participants to explore an occupation or group of occupations before committing to a full apprenticeship.

Apprenticeships ease the school-to-work transition

European studies have highlighted a general consensus on the positive effects of apprenticeships in easing the school-to-work transition. European countries with apprenticeship systems (especially Germany, Austria, Switzerland, Denmark and the Netherlands) experience better youth employment patterns than those with little or no apprenticeship participation. In the European countries where the apprenticeship system is most developed young people have better labour market outcomes than in other countries. This extends to the superiority of apprenticeships compared to vocational school-based education in promoting a smooth transition.⁶ The latest 2014 data for Australia indicates that over 78,000 15-19 year olds made a transition to apprenticeships and 22 per cent of these began in school.⁷

⁵ *The effectiveness and costs-benefits of apprenticeships: results of the quantitative analysis*, European Commission, September 2013.

⁶ *The effectiveness and costs-benefits of apprenticeships: results of the quantitative analysis*, European Commission, September 2013.

⁷ *Young people in education and training 2014*, NCVET, Commonwealth of Australia, 2015.

Employer satisfaction

Employers and supervisors often experience a great deal of satisfaction during the process as they help apprentices and trainees mould new skills and gain confidence in a work environment. For example, 86 per cent of registered apprenticeship sponsors in the United States say they would strongly recommend hiring an apprentice, in addition to the 11 percent who say they would recommend registered apprenticeship with some reservations. All told, a total of 97 per cent of sponsors in the United States recommend apprenticeship programs.

Some European studies have highlighted the costs-benefits to employers of participation in apprenticeships. The results are mixed depending on the industry, company size and time frame. On average, German companies incur a net cost during the training but experience higher productivity from trained apprentices at a later stage. In some industries apprenticeships represent a long-term investment while in others they may represent a substitute for regular employment.⁸ Australian research confirms that the return on investment varies across occupations with the most significant benefits accruing to those who undertake trade training.⁹

Benefits for apprentices

Earn while learning

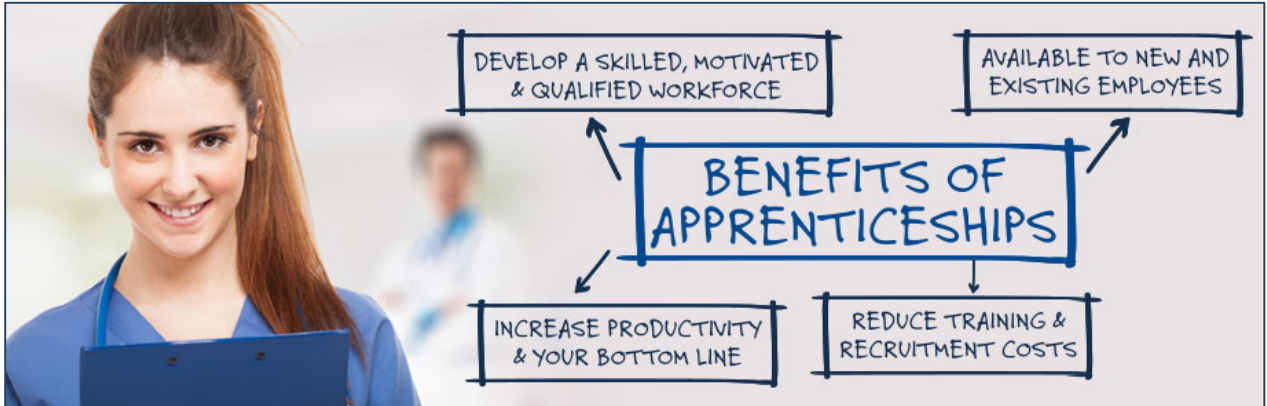
Apprenticeships and traineeships combine paid work with training, enabling the apprentice to earn money while completing the qualification. There is a benefit from working in an area of interest and the opportunity to gain the skills and knowledge needed for the chosen occupation in a real-world, practical setting. Apprentices also benefit from the Federal Government's Trade Support Loans, which provide up to \$20,000 over four years. These loans are designed to assist apprentices with the costs of completing their training and, like HELP loans for VET and university students, are repaid through the taxation system.

Choice from a wide variety of interests and occupations

There are more than 500 training opportunities on offer to apprentices and trainees, in areas such as agriculture, automotive, building and construction, business, food, hairdressing, information technology, and sport and recreation. Apprenticeships allow students to become qualified in a skilled trade, while traineeships offer vocational training in a range of different fields.

⁸ *The effectiveness and costs-benefits of apprenticeships: results of the quantitative analysis*, European Commission, September 2013.

⁹ Tom Karmel and John Rice, *The economics of apprenticeships and traineeships*, NCVER, Commonwealth Government, 2011.



Training is flexible

Apprenticeships and traineeships can be completed full time or part time and there is no set period of time allocated to training. Instead, training should be competency-based, so is completed when the skill level is achieved.

Nationally recognised qualifications

In addition to practical work experience, apprentices and trainees gain a nationally recognised VET qualification. This training is delivered at a Registered Training Organisation (RTO), such as a TAFE institute or private college.

Start at school

Students have the opportunity to start an apprenticeship or traineeship while at school through a school-based apprenticeship or traineeship. Apprenticeships are usually completed after the student completes school, while traineeships may often be completed during school. Increasingly, employers express a preference for apprentices who have completed, or are planning to complete, Year 12. This makes school-based apprenticeships an attractive option for both parties.

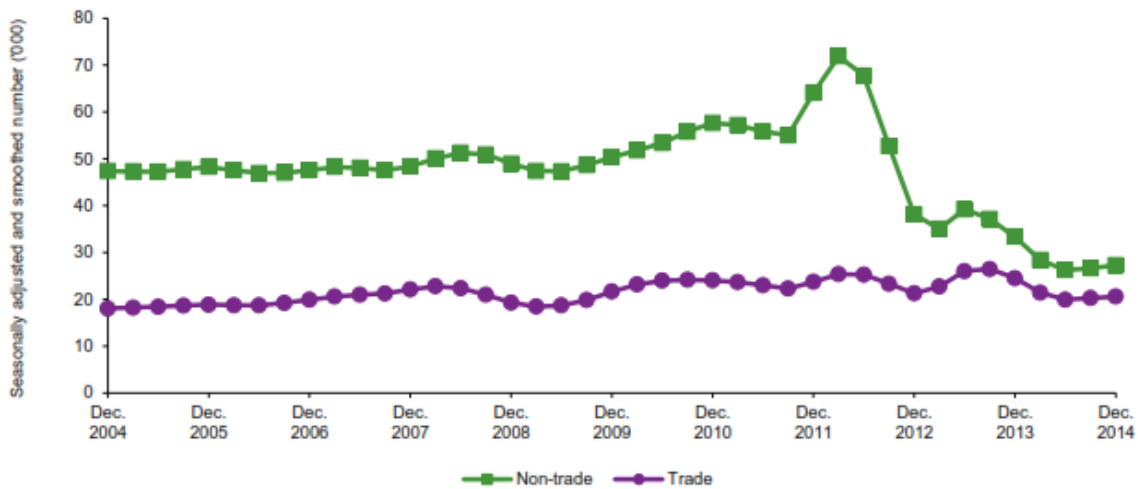
It is imperative that Australia’s apprenticeship architecture achieves the right skills for young people and employers to fuel innovative and competitive companies.

What is the current situation?

Levels of Participation

Recent instability around the levels of apprentice and trainee commencements jeopardises the ongoing supply of newly skilled tradespeople.

Figure 1: Quarterly commencements for trade and non-trade occupations, seasonally adjusted and smoothed, 2004-14 ('000)



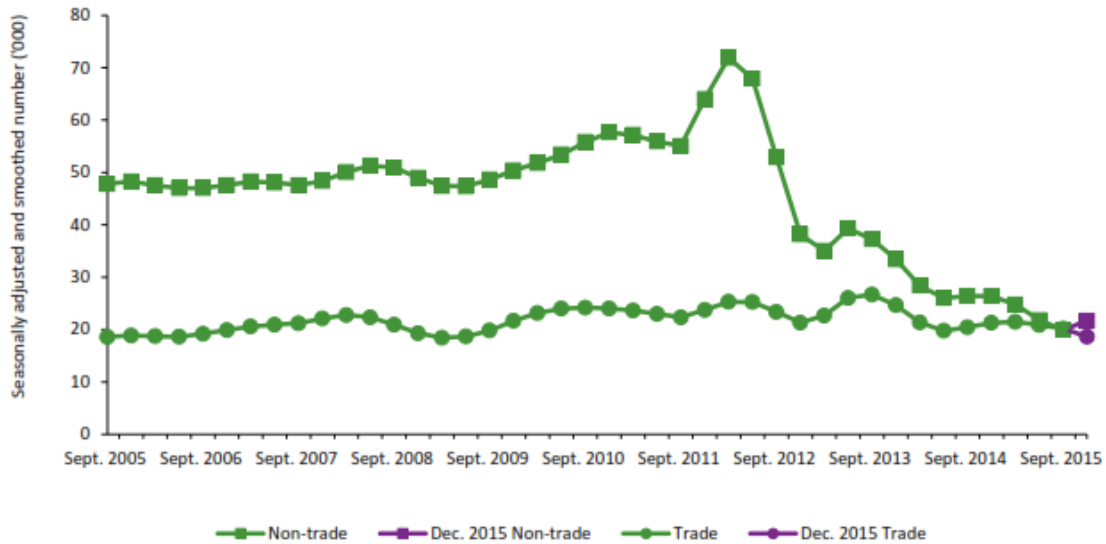
The latest annual data from the NCVER indicates that the number of apprentices and trainees in training at the completion of 2014 was around 316,400 – a decrease of 18.3 per cent on the previous year. This is the lowest level for a decade. This data includes a decrease in commencements by 21.9 per cent and a decrease in completions of 17.8 per cent for the same period. The percentage of Australian workers employed as an apprentice or a trainee declined from 3.3 per cent to 2.7 per cent during this period. This is also the lowest for a decade.¹⁰

The latest update for the September Quarter for 2015 confirms the continuing deterioration. The NCVER has reported for the September quarter 2015 there were 295,300 apprentices and trainees in training – a decrease of 13.7 per cent on the same period in 2014. For this period trades commencements decreased by 19.3 per cent. All jurisdictions experienced a decrease with the heaviest being the Northern Territory (16.5 per cent), ACT (13.7 per cent), New South Wales (12.9 per cent), Tasmania (12.6 per cent), and South Australia (12.1 per cent).¹¹

¹⁰ *Apprentices and trainees 2014*, NCVER, Commonwealth of Australia, 2015.

¹¹ *Apprentices and trainees 2015, September Quarter*, NCVER, Commonwealth of Australia, 2016.

Figure 2: Trade and non-trade commencements, seasonally adjusted and smoothed, September 2005-December 2015



Source: NCVER, Australian vocational education and training statistics, Apprentices and trainees, September Quarter 2015

Apprenticeships have long been sensitive to the economic cycle. The employment relationship makes commencements vulnerable to economic downturns and employers are cautious about expanding their operations. This is compounded by the complexities of the system. One of the most successful apprenticeship arrangements is the use of the group training model. Group training organisations (GTOs) act as the employer of apprentices and host them to companies. The GTO recruits, inducts and mentors the apprentice for the duration of their training contract. Group training companies are able to support first-time employers of apprentices to improve their chances of completion. A lack of apprenticeship commencements contributes to skills shortages following the end of a downturn.¹²

Completions

The low level of completions has been an issue for some time. The completions by each quarter since September 2010 reveal a decrease from around 40,000 to 27,600 in September 2015. This is the lowest for the period. In the September quarter 2015 compared with the September quarter in 2014 completions decreased by 6 per cent. In the 12 months ending 30 September 2015 compared to the 12 months ending 30 September 2014 completions decreased by 21.5 per cent.¹³

¹² *A shared responsibility: apprenticeships for the 21st century*, Final Report of the Expert Panel, Commonwealth of Australia, 2011, page 21.

¹³ *Apprentices and trainees 2015*, September Quarter, NCVER, Commonwealth of Australia, 2016.

Table 1: Completions in each quarter by state/territory, 2010-2015 ('000)

Quarter	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
September 2010	11.8	10.5	8.9	2.7	4.1	1.2	0.3	0.4	40.0
December 2010	13.0	13.7	11.4	3.4	4.2	1.6	0.4	0.5	48.2
March 2011	15.5	11.1	8.7	3.5	3.6	1.0	0.4	0.4	44.1
June 2011	12.5	11.2	9.0	2.7	3.6	1.1	0.3	0.5	40.9
September 2011	13.0	12.2	10.1	3.0	4.1	1.4	0.3	0.2	44.3
December 2011	14.8	16.0	12.0	3.2	4.5	1.7	0.5	0.3	52.9
March 2012	15.8	12.4	9.6	3.6	3.8	1.3	0.3	0.6	47.3
June 2012	12.1	12.8	9.4	3.2	3.9	1.1	0.3	0.3	43.0
September 2012	12.0	12.7	9.3	3.1	4.2	1.2	0.3	0.6	43.4
December 2012	14.5	22.6	12.4	3.9	4.1	1.7	0.5	0.8	60.6
March 2013	16.4	11.3	9.6	3.4	4.1	1.2	0.2	0.8	47.1
June 2013	18.9	15.4	15.6	5.2	5.2	1.9	0.4	0.5	63.2
September 2013	10.9	8.8	7.4	2.5	4.4	0.9	0.3	0.6	35.8
December 2013	13.2	12.4	9.8	2.9	5.1	1.3	0.4	1.2	46.2
March 2014	15.2	8.1	7.3	3.0	3.8	0.9	0.3	1.0	39.6
June 2014	13.8	10.8	10.7	3.8	5.2	1.1	0.3	1.3	47.0
September 2014	8.1	7.0	6.5	2.2	3.9	0.8	0.2	0.7	29.4
December 2014	11.2	10.5	8.6	2.3	4.9	1.2	0.4	0.6	39.7
March 2015	11.0	5.9	5.9	2.5	3.4	0.8	0.2	0.9	30.7
June 2015	8.3	5.5	7.1	2.2	4.1	0.9	0.3	0.8	29.2
September 2015	7.9	5.8	6.0	1.9	4.2	1.0	0.3	0.7	27.6

In terms of the overall completion rates it is about half of the commencements. Specifically, completion rates for apprentices and trainees in trades occupations were 46 per cent for 2010 commencements and projected to decrease to 41.4 per cent for the 2014 commencements. For those in non-trades occupations the rate is 55.8 per cent for 2010 commencements and projected to increase slightly to 57.5 per cent for the 2014 commencements. Individual completion rates for apprentices and trainees commencing in 2010 were 56 per cent for trades occupations and 57.6 per cent for non-trades occupations.¹⁴

There are several reasons for this low level of completions including occupational characteristics, individual characteristics, practices at the jurisdictional level and aspects of delivery and wages. Occupations that require a specific qualification to gain employment have above-average completion rates. Occupations covering community and personal service workers and machinery operators and drivers fall into this category.¹⁵

There are often multiple factors that contribute to the non-completion of an apprenticeship or traineeship. Key among these are workplace issues, a lack of support for the parties and circumstances where apprentices misunderstand the nature of the work, sometimes caused by ineffective career counselling. Support is needed, particularly in the first six months of the arrangement when the risk of non-completion is the highest.

¹⁴ *Completion and attrition rates for apprentices and trainees 2014*, NCVER, Commonwealth of Australia, 2015.

¹⁵ *A shared responsibility: apprenticeships for the 21st century*, Final Report of the Expert Panel, Commonwealth of Australia, 2011, page 22.

NCVER has completed some research which highlights the role of ‘culture’ in apprenticeship completions. Some positive indicators of completions were revealed. Government-employed apprentices have a completion rate 28.5 points higher than privately employed apprentices and group training apprentices have only a three percentage point higher completion rate than those with individual private employers. As well as employer type, employer size is also important. Employers with at least 25 apprentices have much higher completion rates than smaller employers. Social background is also a factor. There is an increase of about five percentage points in completion as the proportion of trades workers in the apprentices local area increases. This suggests that apprentices receive more social support in areas where trades employment is more common.¹⁶

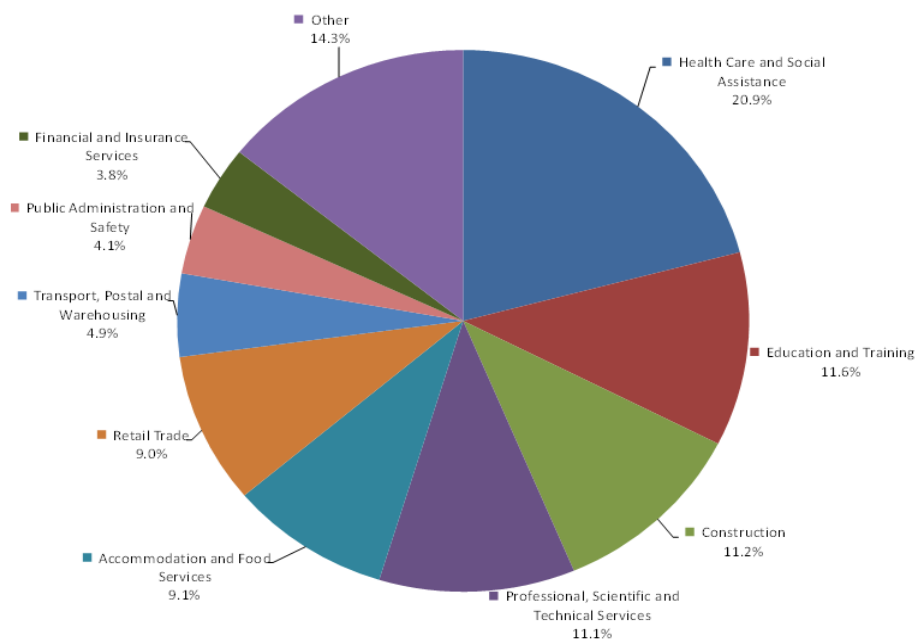
It is essential that steps are taken to significantly improve the completion rates of apprenticeships and traineeships.

Changing Labour Market

As the Australian economy evolves there has been a shift in the major categories of employment. The largest industries for projected employment growth are health care and social assistance (20.9 per cent), education and training (11.6 per cent), construction (11.2 per cent) and professional, scientific and technical services (11.1 per cent). Apart from construction these are employment areas that do not traditionally feature apprenticeship training. These occupational changes reflect the long-term movement away from secondary industries such as manufacturing to a more service-based economy.

Chart 1: Share of projected employment growth by industry

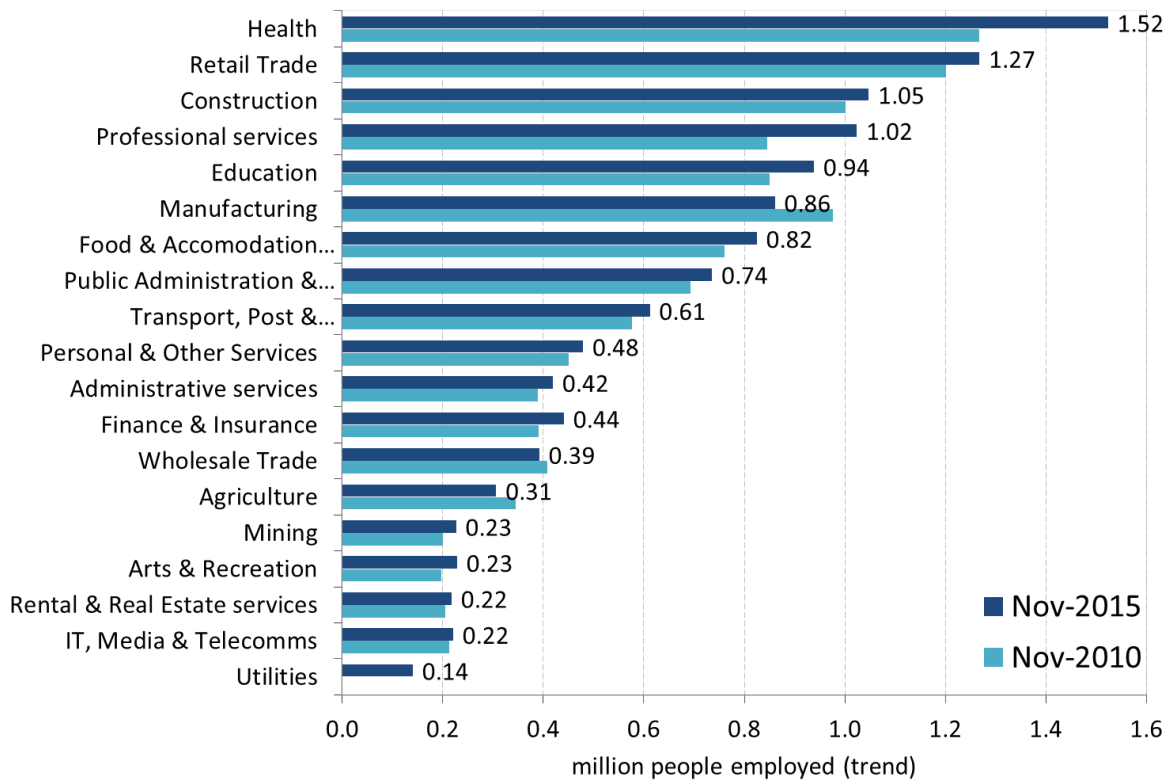
Share of projected employment growth, by industry¹ - five years to November 2019



¹⁶ Tom Karmel and David Roberts, *The role of ‘culture’ in apprenticeship completions*, NCVER, Commonwealth of Australia, 2012.

Chart 2: Australian employment in major industries

In terms of the numbers of employees there have been examples of significant growth from 2010-2015. In terms of the largest areas of employment, health, retail, construction, professional services and education have all grown. These are the areas of greatest employment projected into the future.

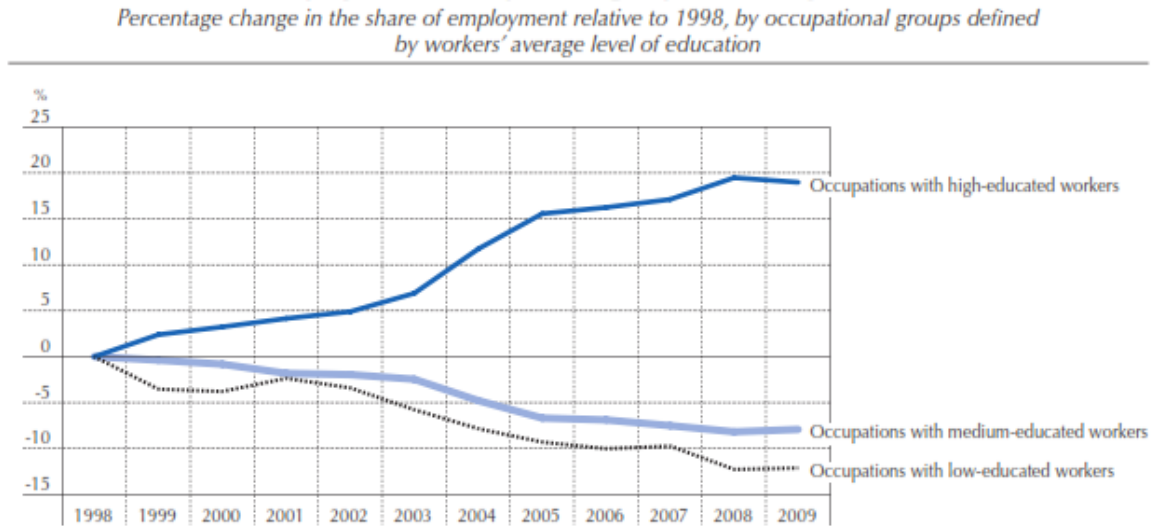


Source: ABS, *Labour Force Australia*, to November 2015

A further consideration is the long-term trend of increased occupations with high-educated workers and a decrease in occupations with medium- and low-educated workers.¹⁷

¹⁷ *OECD Skills Outlook, 2013*, First results from the Survey of Adult Skills.

Chart 3: Evolution of employment in occupational groups defined by level of education

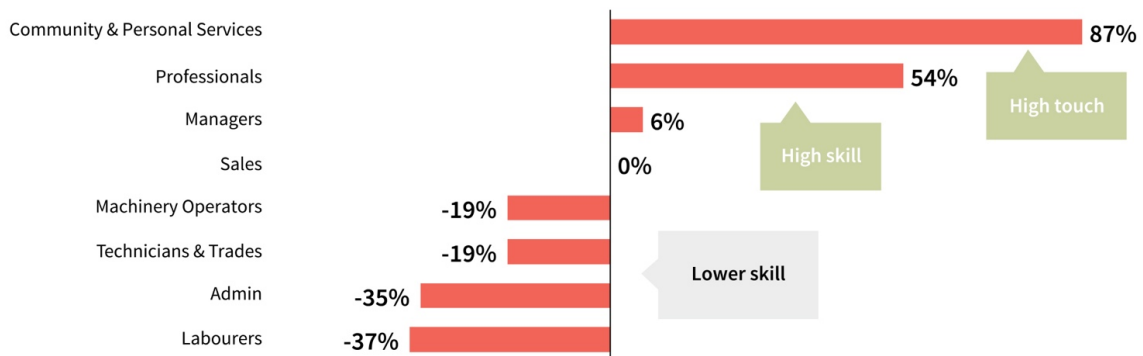


Apprenticeships are generally cast at Certificate III which is outside of the high-educated workers group.

Another way of considering this is the growth in occupations that are high skill or “high touch” compared to the decrease in lower-skill routine occupations. Again, these trends have serious implications for the future of apprenticeships.¹⁸

Chart 4: Growth of high skill and high touch occupations

Fig 2. Occupations that are high skill or high touch have grown, while lower skill routine occupations have shed jobs, 1991 to 2015
% growth in # of jobs by occupation – growth in total labour force



Source: ABS, AlphaBeta analysis

¹⁸ *The New Work Order*, Foundation for Young Australians.

Further data from the expanded VET collection indicates that apprenticeships and traineeships are shrinking as part of the total VET effort and part of the overall labour market. Of the approximate 3.9 million VET students only 9.7 per cent are participating in apprenticeships and traineeships.¹⁹ This work-based training pathway is the one that most engages employers in the VET system and is now in serious decline. Given the changing nature of the economy and employment it is doubtful that this can improve without intervention. Measures need to be introduced to support this crucial pathway.

National Consistency

The responsibilities for apprenticeships and traineeships are shared between the Commonwealth Government and the various states and territories. The Commonwealth has responsibility for the Australian Apprenticeship Support Network, the regulation of training standards through the Australian Quality Skills Authority, administration of incentive payments, the promotion of apprenticeship and training pathways as well as interactions with employers, apprentices and training providers.

States and territories also have responsibility for their respective systems including administering training contracts. States and territories also manage their own incentive funding systems and the general funding of the system based on differing entitlement models.²⁰ The end result of this very complex mix is a lack of national consistency that frustrates employers, especially those operating on a national basis. The labour market operates on a national basis and state differences are an unnecessary and anachronistic impediment to labour mobility.

The following table reproduced from the Reform of Federation White Paper demonstrates the complexity of current VET arrangements which include apprenticeships.²¹ The White Paper indicated that these arrangements are under pressure and they are some distance from a truly national approach to provide consistency and remove unnecessary complexity.

¹⁹ *Total VET students and courses 2014*, NCVER, Commonwealth of Australia, 2015.

²⁰ See for example *The Reform of Federation White Paper, Roles and responsibilities in education*, Issues Paper 4, December 2014, pages 23 – 24.

²¹ *The Reform of Federation White Paper, Roles and responsibilities in education*, Issues Paper 4, December 2014, page 44.

Table 2: Summary of current VET arrangements

Area	State and Territory role	Commonwealth role	Shared roles
Policy	<i>Shared</i> Shared responsibility for national policy	<i>Shared</i> Shared responsibility for national policy, taking a national leadership role	<i>High</i> Both levels of government collaborate in developing national policy
	<i>Lead</i> Majority funder of public TAFE institutes Responsible for allocation of public funds within jurisdiction for main subsidies for VET Fund apprenticeships training in RTOs	<i>Secondary</i> Secondary funder of students, including apprentices, through income support, income contingent loans and targeted training programmes Secondary funder of training through national agreements and employers	<i>High</i> Both levels of government fund and support training
Delivery	<i>Lead</i> Responsible for the delivery of policies and programmes associated with VET within their jurisdictions, including contracting (delivery of training is through third parties, i.e. RTOs) Responsible for administration of TAFE institutes	<i>Secondary</i> Secondary role in delivery of services for apprentices and in managing delivery of training to certain groups (e.g. new migrants, literacy and numeracy training) (delivery of training is through third parties, i.e. RTOs)	<i>Low</i> Some areas of overlap in delivery of support services for apprentices and in management of training to certain groups
	<i>Secondary</i> Shared responsibility for national standards Victoria and Western Australia are responsible for registration, accreditation of courses and regulation of the domestic sector in their jurisdiction	<i>Lead</i> Shared responsibility for national standards Responsible for registration, accreditation of courses and for regulation of sector (with exception of Victoria and Western Australia) Responsible for oversight of international students	<i>Medium</i> Commonwealth and States and Territories share responsibility for national standards and cooperate in regulation

Key

Who leads

Lead Secondary Shared lead

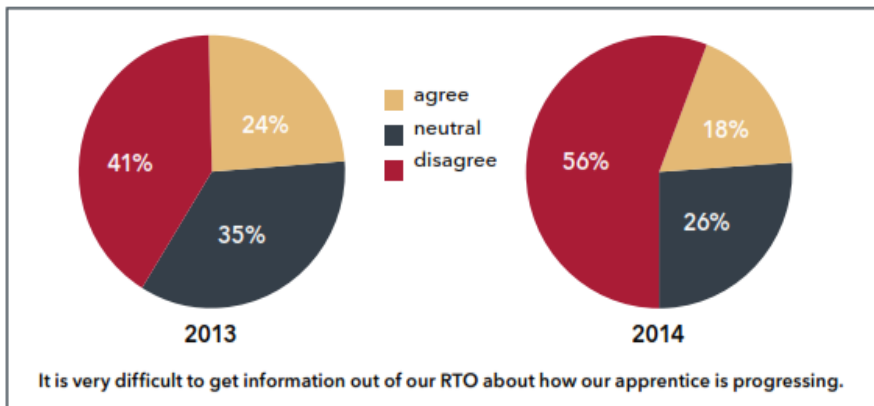
Level of overlap

High Medium Low

In addition to this complexity, the system has many stakeholders and participants engaged in the system. Beyond governments there are also Registered Training Organisations, Australian Apprenticeship Support Network providers, employers, industry organisations, Skills Service Organisations, unions, group training organisations and regulatory and licensing authorities. The system has become very complex and confusing.

Competency Based Progression and Completion

Despite the long-standing policy of competency-based training in Australia, too many Registered Training Organisations adopt time-served approaches to these arrangements. In late 2015 Ai Group released its landmark Engineering Excellence Report which highlighted the issues and identified the strategies around competency-based progression and completion in the engineering trades.²² A key aim of this project was to build a system where employers play a key role in confirming the competence of apprentices. This project involved ten public and private RTOs and over 2,000 apprentices. The process reflects the centrality of the workplace in the demonstration of competence and the fundamental nature of the contract between an employer and an apprentice.



The experience of this project indicates that few Registered Training Organisations had strategies to involve employers in this process even though the industrial award, in the case of engineering, requires employers to agree with RTO assessments before an apprentice is able to progress.

Prior to the project 24 per cent of employers reported that it was very difficult to receive RTO information about the progress of their apprentice. The project altered this situation so that at the evaluation at the end of the project only 18 per cent of employers responded in this way. Also, there was a significant increase by those who disagreed with this statement. The project successfully developed tailored training plans to facilitate this, established agreed processes to assist trainers, developed work-based activities to assist employers and addressed processes that acted as barriers to change.

It was clear from the project that RTOs need assistance and professional development to assist them in the process of adopting competency-based progression and completion. The widespread application of this process will act as an incentive to apprentices and contribute to their completion of the apprenticeship.

²² *Engineering Excellence Report*, Australian Industry Group, November 2015.

Pathways to Australian Apprenticeships



Pre-apprenticeships provide initial training in a particular trade to enable them to gain an appreciation of the area and to assist them to gain a full apprenticeship. They expand the pool of suitable candidates for apprenticeships. They were originally conceived in an era of a deteriorating youth labour market and many young people experience difficulties in the transition from school to work.²³

There tends to be an expansion during economic downturns when young people are finding it difficult to transition to employment. The Foundation for Young Australians has reported an increase in the time it takes young people to enter full-time work.²⁴

It is difficult to obtain data about the extent of pre-apprenticeship participation as they are not included in the National VET Provider Collection. A study in 2011 found that there were ten nationally accredited and 24 training package courses with pre-apprenticeship activity.²⁵ The majority of these enrolments were within Certificate II courses (58.5 per cent) and a further 39.4 per cent were Certificate I courses. Other key characteristics were that 81.9 per cent were male, 68.8 per cent had not completed Year 12 and 42.6 per cent came from extreme and high disadvantaged backgrounds.

Australian Apprenticeship data for young people reveals a disturbing trend. For those aged 19 years and younger the number in training has fallen from 136,200 in June 2010 to 95,000 in June 2015. For those aged 20-24 years the fall is less dramatic: from 113,300 to 96,200 over the same period. Commencements over this period indicate the same pattern. There were 23,100 commencements for those under 19 years of age in June 2010 and 15,800 in June 2015. The commencements for those aged 20-24 years fell during the same period from 13,200 to 8,800.²⁶ Young people are not embracing Australian Apprenticeships. In this context, increased participation in pre-apprenticeship programs may contribute to the overall growth of Australian Apprenticeships.

One of the factors leading to the perceived decline in pre-apprenticeships in recent years is the expansion of options for young people. There has been a significant expansion of VET in Schools programs.²⁷ The latest data indicates that there are 247,200 nationally participating in VET in Schools programs even though there has been a recent 1.3 per cent fall in the total.²⁸

²³ Thorsten Stromback, *The effect of a pre-apprenticeship on getting an apprenticeship*, NCVET, Commonwealth of Australia, 2012.

²⁴ *How are young people faring in the transition from school to work?*, Foundation for Young Australians, 2015.

²⁵ Paul Foley and Davinia Blomberg, *Pre-apprenticeship training activity*, NCVET, Commonwealth of Australia, 2011.

²⁶ *Apprentices and trainees 2015*, June Quarter, NCVET, Commonwealth of Australia, 2015.

²⁷ Nhi Nguyen, *The impact of VET in Schools on young people's intentions and achievements*, NCVET, Commonwealth of Australia, 2013.

²⁸ *VET in Schools 2014*, NCVET, Commonwealth of Australia, 2015.

Table 3: VET in Schools Participation 2010 - 2014

	2010 (’000)	2011 (’000)	2012 (’000)	2013 (’000)	2014 (’000)	%	2013–14 % change
School-based apprentices and trainees	17.4	18.5	23.0	22.1	21.0	8.5	-5.3
Other VET in Schools students	216.5	230.9	229.6	228.2	226.2	91.5	-0.9
Total	233.8	249.4	252.6	250.3	247.2	100.0	-1.3

Source: NCVER National VET in Schools Collection, 2010–14

As a part of this development the emergence of School-based Apprenticeships has provided an option to participate in an apprenticeship while still at school. The data indicates that participation in this pathway has grown to 21,000 providing a further option for young people.²⁹

Table 4: School-based apprentices and trainees 2010-2014

	2010 (’000)	2011 (’000)	2012 (’000)	2013 (’000)	2014 (’000)	2013–14 ² % change
School-based apprentices and trainees						
New South Wales	2.5	2.4	2.3	2.5	2.8	12.6
Victoria	3.5	3.9	4.2	3.6	3.9	8.4
Queensland	8.8	8.9	13.2	13.1	11.7	-11.0
South Australia	0.7	1.1	0.9	0.9	0.3	-63.3
Western Australia	0.9	1.1	1.2	1.1	1.2	8.6
Tasmania	0.5	0.6	0.7	0.6	0.7	12.3
Northern Territory	0.1	0.1	0.1	-	0.2	-
Australian Capital Territory	0.4	0.4	0.4	0.3	0.2	-33.0
Total school-based apprentices and trainees	17.4	18.5	23.0	22.1	21.0	-5.3

This pathway is also not without its issues as there are only significant levels of participation in Queensland and there has been a recent 5.3 per cent fall in national numbers.

Historically, reviews of pre-apprenticeship training have been positive. Participation in a pre-apprenticeship program does have an effect on the reasons for non-completion of an apprenticeship but the effect is not uniform. It varies across different industries and occupations. Participation in pre-apprenticeships does increase the understanding of what work to expect in an apprenticeship, however there is little evidence that this understanding translates into higher completions.³⁰

²⁹ *VET in Schools 2014*, NCVER, Commonwealth of Australia, 2015

³⁰ Tom Karmel and Damian Oliver, *Pre-apprenticeships and their impact on apprenticeship completion and satisfaction*, NCVER, Commonwealth of Australia, 2011.

Apprenticeship Case Studies

ANCA

Over the last five years ANCA has tripled its turnover and increased the overall workforce from 400 to around 1,000. ANCA currently has 16 apprentices and almost 500 employees based in Australia. There is an annual intake of 4-5 apprentices across a range of specialties including mechatronics, electrical, machining and fitting and assembly.

The ANCA Group was established in 1974 in Melbourne and is made up of three divisions. ANCA Machine Tools is a leading manufacturer of high quality CNC tool grinders. It is also known for the versatility of its software and machines that produce a wide variety of complex tools. ANCA Motion provides automated solutions to the global tool and automation markets. Tinfish provides sheet metal solutions. The global headquarters is located in Melbourne with manufacturing sites in Bayswater, Thailand and Taiwan. Branch sales and service offices are located in the USA, Germany, China and the UK.

The company exhibits many key features of the apprenticeship system. The apprentices are employed through Ai Group's Apprentice and Trainee Centre for the first year and then ANCA employs them directly. The apprentices are instructed by a dedicated apprentice master in a specially constructed Apprentice Training Centre (ATC). Each apprentice has their own bench and toolkit.

The first year is spent in the ATC learning the basics and how to put a machine together. Over the next three years the apprentices attend TAFE one day a week and each year are rotated through three different ANCA departments. This ensures they are trained in all technical aspects and helps them to decide the specialty they prefer when their apprenticeship is completed.

The apprentices study towards a Certificate III with many opting to complete a Certificate IV and some continuing to a Diploma. In some circumstances the company funds the cost of additional study. There is recognition of the need for increasingly higher-level skills for the workforce and many of the apprentices have won various awards.

ANCA has a number of strategic partnerships with TAFE Institutes and universities for apprenticeship and other specialist training. ANCA employs graduates and also collaborates with universities on



research topics relevant to the company. ANCA is an innovative organisation that values continuous learning. It provides leadership and management training on site and sponsors many IBL (Industry Based Learning) students from various universities.

"Many of the senior management at ANCA started their working life as an apprentice and we understand the importance of this learning pathway. Apprenticeships are the foundation of the development of careers in engineering." Grant Anderson, Group CEO



newfurn

Newfurn Training Academy established by Choices Flooring offers the leading Apprenticeship Program for new flooring installers, Trade Card accreditation for experienced flooring installers and Master Class professional development opportunities for flooring installers, workplace trainers, sales consultants and store owners. The Academy is a direct response by industry to meet the increasing demand for retail floor covering and installation services and the inability of the training system to satisfy this demand.

The Newfurn Training Academy is a specialist training provider for the floor coverings industry. The Academy is in a unique position of having direct support from major Australian and international flooring manufacturers and distributors referred to as Alliance Partners.

With the assistance of Alliance Partners, the Academy has access to the best specialist trainers in the flooring industry as well as the latest information on product developments, installation techniques and industry trends to ensure that professional development is always of the highest standard. All accredited training provided by the Newfurn Training Academy is delivered under the auspices of



various Registered Training Organisations (RTOs) such as Ai Group, TFIA Business Services and Workspace Training. Participants who successfully complete their training are issued with nationally recognised statements of attainment or qualifications under the Australian Qualifications Framework.

The first intake of 32 apprentices from all over Australia has started the Certificate III in Flooring Technology. At the conclusion of the two-year training program the apprentices will continue to be mentored by their employer and

workplace supervisor for the remainder of the apprenticeship. The program is supported by a purpose-built learning management system that enables apprentices to access learning resources and submit evidence of competence via mobile technology.

Over time, the Academy will roll out tailored programs in a wide range of areas, including Customer Service, Professional Sales, Interior Decoration, Business Management and Leadership. But at this stage of its development, the focus is on Flooring Installers and Apprentices.

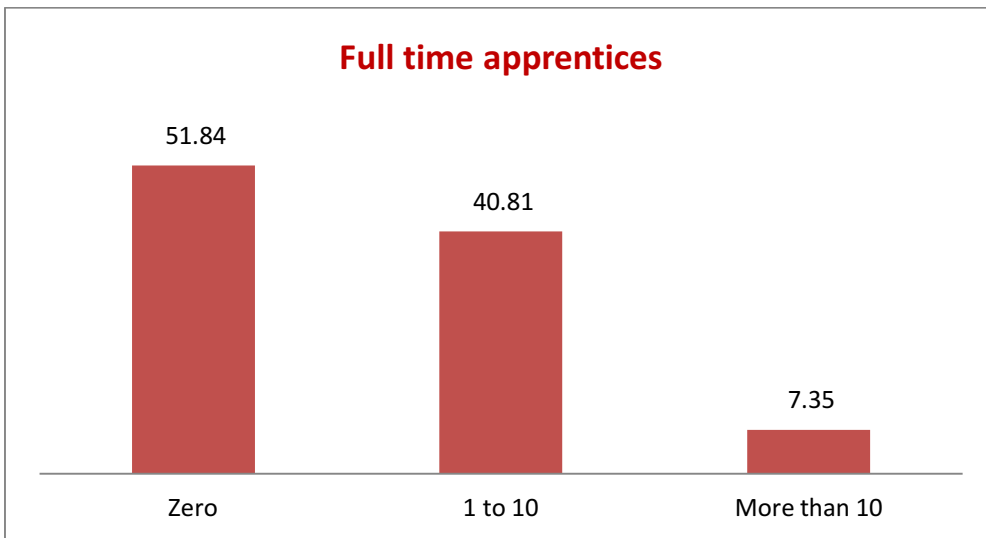
“Newfurn Training Academy is a highly innovative way to meet the challenges of our industry. The development of highly skilled apprentices is the foundation of this approach.” Andrew Lewis, Chief Executive Officer



What are employers saying?

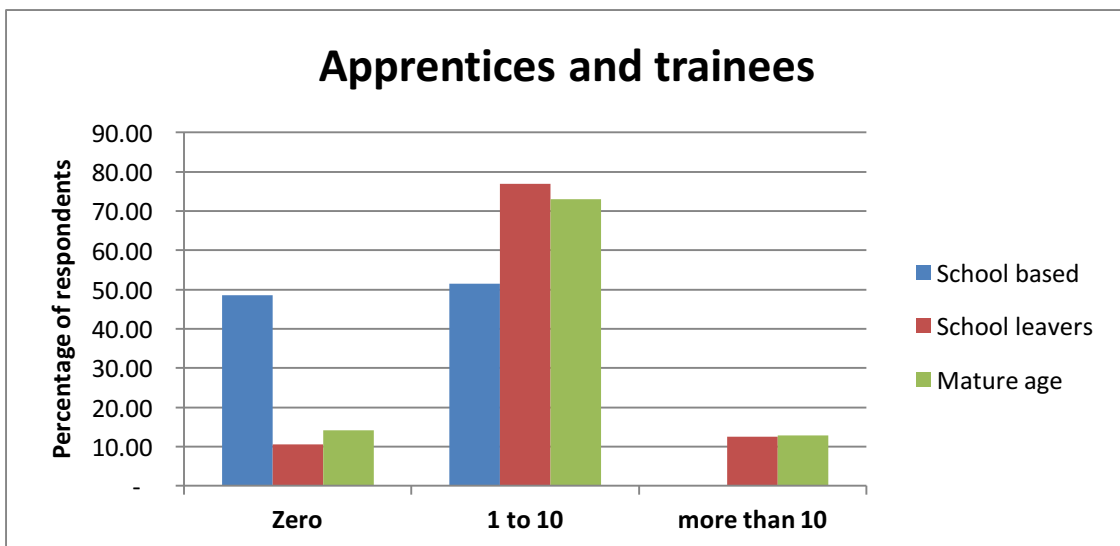
The latest Ai Group Workforce Development Needs survey requested employers to indicate how many apprentices they have. Of those employers engaging apprentices the largest group of over 40 per cent have one to ten apprentices. A much smaller proportion of over seven per cent have more than ten apprentices.

Chart 5: Full Time Apprentices



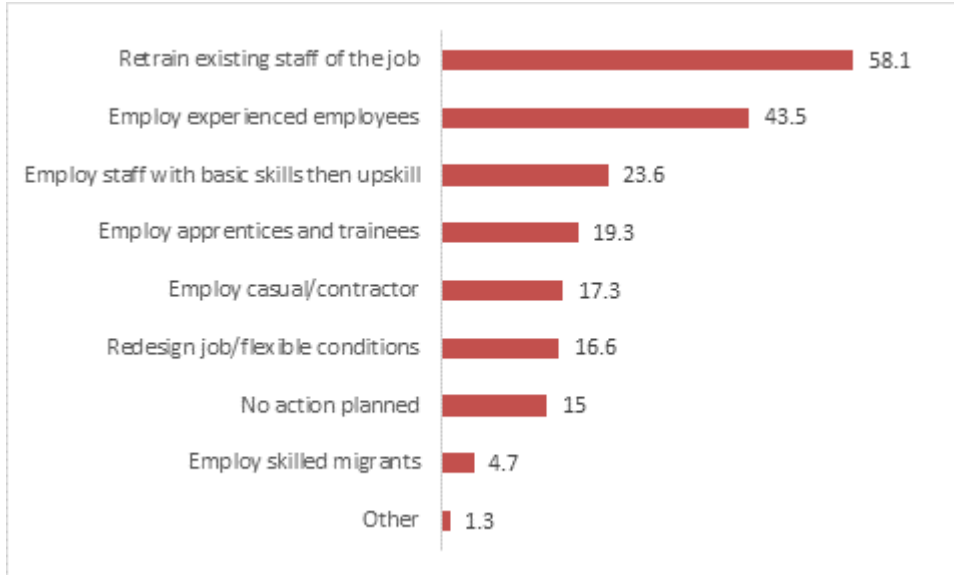
In terms of sources of apprenticeships the distribution is evenly spread between school leavers and mature age for both the 1-10 and over 10 groupings.

Chart 6: Types of Apprentices



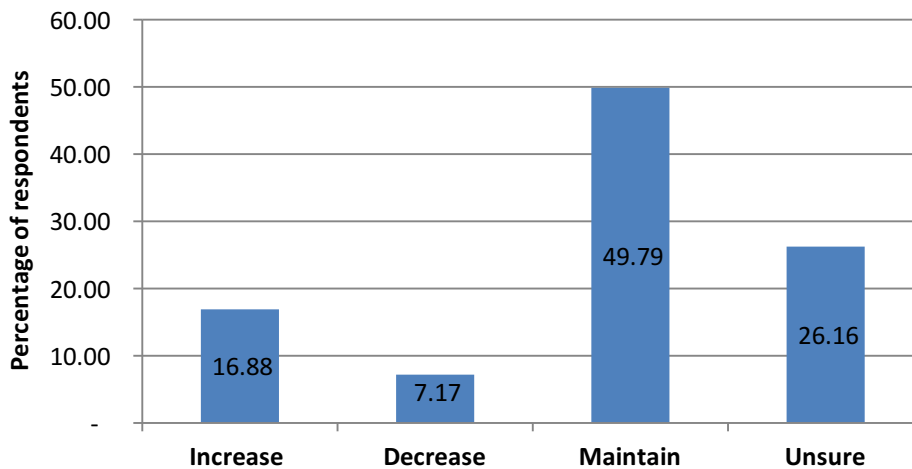
From this data it would appear that school-based apprentices are not being heavily sourced by employers.

Chart 7: How Business Intends to Meet Skills Needs



Employers were also asked about how they intend to meet their skills needs and to nominate as many of the options they wished. From this it is clear that while employers consider engaging apprentices and trainees is important, it is ranked as the fourth preferred option at 19.3 per cent. The most preferred options include retraining existing staff on the job (58.1 per cent), employing experienced employees (43.5 per cent) and employing staff with basic skills and then updating skills (23.6 per cent). It must be remembered that employing apprentices and trainees is not always a staffing solution or preference for all companies.

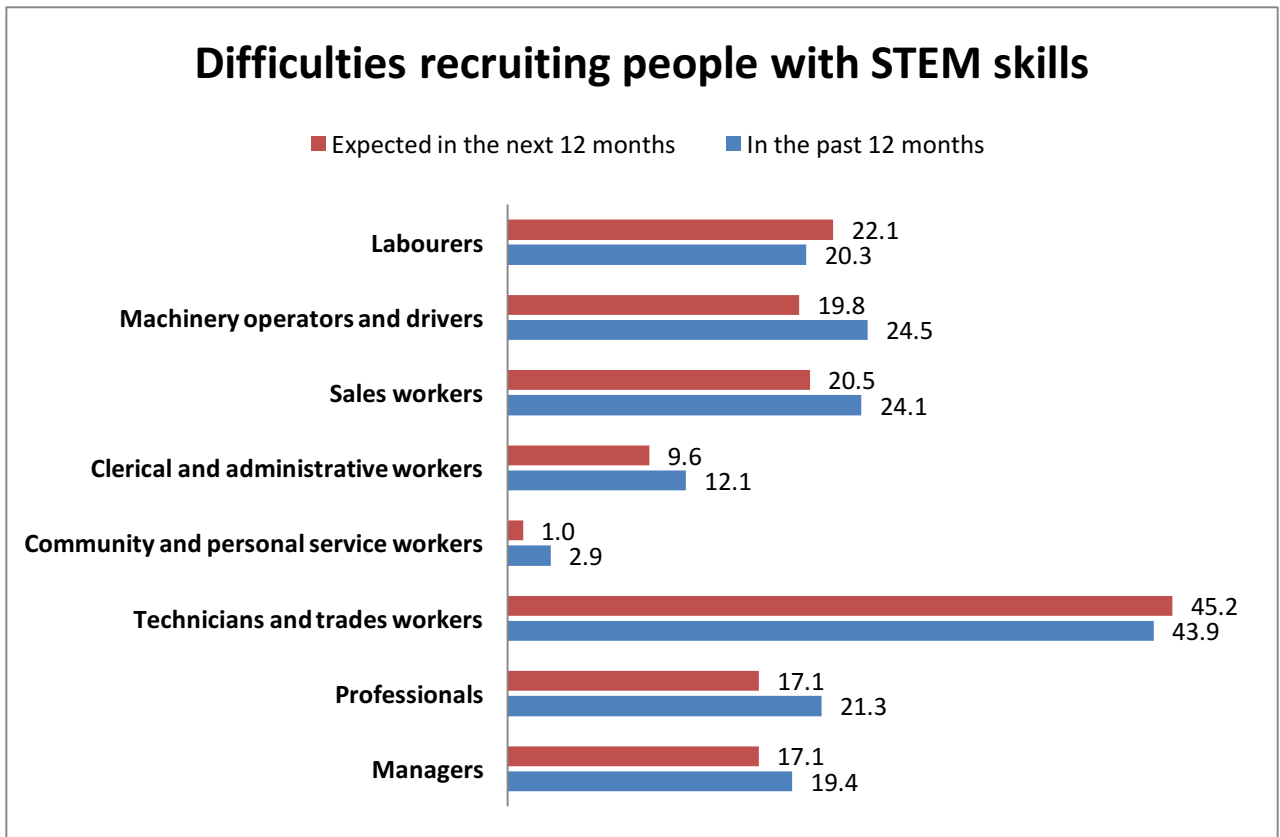
Chart 8: Employment intentions for apprentices for the next 12 months



This data is confirmed as only about 17 per cent of employers intend to increase apprentices and trainee numbers over the next twelve months. A further 50 per cent will maintain their numbers, while 33 per cent intend to decrease numbers or are unsure about their intentions.³¹ This suggests that apprenticeship numbers are unlikely to increase in the immediate future.

A further interesting finding relates to the difficulties employers face recruiting people with Science, Technology, Engineering and Mathematics (STEM) skills. By far the largest group is the Technicians and Trades Workers at 43.9 per cent currently and expected to grow to 45.2 per cent in the next year. This grouping includes many trade apprentices. Employers continue to experience difficulty recruiting apprentices and trainees with increasingly important STEM skills.

Chart 9: Difficulties Recruiting People with STEM Skills



³¹ Survey of workforce development needs (Ai Group internal).

What needs to be done?

In response to these issues surrounding Australian Apprenticeships it is imperative that a range of measures be considered to support this pathway.

Employer Incentives

European experience has demonstrated that in the absence of public intervention the market produces less than the optimal proportion of apprentices. This has clearly been the case in Australia where employers are sensitive to the economic cycle which contributes to a variation in the number of apprenticeships. This is why employer incentives in the form of either direct subsidies and/or tax deductions are required to reduce employer costs and encourage them to engage apprentices. However, incentives do not motivate companies that have already decided to train. Direct subsidies are more effective in encouraging companies to start training rather than for companies which are already training.³²

In recognition of the difficulty employers experience when recruiting employees with STEM skills, consideration needs to be given to the development of a regimen of incentives for STEM-related apprenticeships and traineeships. The introduction of targeted STEM incentives in combination with a focus on employers not currently providing this pathway will assist overcoming the commencements impasse.

Supporting New Employers and Completions

While there are many reasons for the non-completion of apprenticeships and traineeships, the relationship between the employer and the apprentice/trainee is central to this issue. Both the employer and the apprentice/trainee need support to continue the relationship, especially during the first six months when the risks are greatest. A key strategy in this process is the provision of mentoring services. These are now part of the recently established Australian Apprenticeships Support Network which commenced on 1 July 2015.³³

The Apprenticeship Network providers are contracted to provide advice and support services tailored to the needs of employers and apprentices throughout the apprenticeship lifecycle – from pre-commencement to completion. This includes services for both employers and apprentices such as essential administrative support, payment processing and regular contact. In addition, more targeted services such as screening, testing, job-matching and mentoring are provided to those assessed as needing additional support to complete the apprenticeship. Apprenticeship Network providers can also provide assistance to individuals who may be unsuited to an apprenticeship to identify alternative training pathways.

This initiative is relatively new but current indications are that the terms of trade need to be improved to ensure the viability of the system. The Australian Apprenticeship Management System needs to deliver the promised efficiencies. Payment points need to better reward first and second year progressions and provision needs to be better rationalised in rural and regional areas.

³² *The effectiveness and costs-benefits of apprenticeships: results of the quantitative analysis*, European Commission, September 2013, page 16.

³³ www.australianapprenticeships.gov.au/australian-apprenticeships-support-network.

GTOs can play an important role as they can rotate apprentices among host employers to provide considerable benefit. This ensures that where an apprentice is not able to gain sufficient skill-breadth within a single host organisation they can be rotated in other related companies to ensure they meet the breadth requirement of the trade and qualification.

A further rarely acknowledged benefit exists. GTOs make considerable effort to ensure that apprentices complete. Should an apprentice be returned to the GTO, they undertake to place the apprentice with an alternative host organisation. This process is not reported upon; indeed, if employed directly by a company an adverse report often occurs indicating a cancellation of the training contract.

This model has received reduced support from government as some limited mentoring and recruitment services have been integrated into the Australian Apprenticeships Support Network. The decision to remove the Joint Group Training Program funding has had significant consequences for this model. New employers of apprentices could be supported to use a group training organisation to provide support throughout the arrangement.

Group training models can also assist with engaging young people with workplaces by providing work experience and career advice. Further support to group training to fulfil these roles has the potential to increase the interest of young people in Australian Apprenticeships as a viable career option.

Linking to Higher Level Qualifications

One set of measures revolves around attracting a greater diversity of apprentices and encouraging and supporting high achievers to undertake trade careers.³⁴ A key aspect of this approach is to more formally link apprenticeship training to higher-level qualifications including higher education degrees. An example of this is to link Certificate III apprenticeship training in building and construction to Certificate IV and Diploma-level training.³⁵ Such models of innovative practice in apprenticeships could be implemented via sequential, concurrent or integrated models.

A further model worthy of consideration is the combination of apprenticeship training with a higher education degree that is available in the dual-system countries of Europe, such as through the Universities of Applied Science in Germany. Notwithstanding the cultural differences, these settings provide a dual study program which transfers the principle of practice-oriented learning to university studies.

The dual study programme transfers this principle of practice-oriented learning to university studies. It consists of several practical blocks at a company and study phases at a university. The four and a half year programme goes beyond the classic seven semester degree programmes at MUAS, which feature only one internship semester. Students gain considerable practical knowledge at a company alongside their studies and can earn a vocational diploma as well as a university degree.³⁶

³⁴ *Higher Apprenticeships*, Victoria University, September 2012.

³⁵ *Higher Apprenticeships*, Victoria University, September 2012.

³⁶ This example is taken from the University of Applied Science in Munich.
https://www.hm.edu/en/course_offerings/dual_2/index.en.html.

These models are worthy of further investigation to formally extend the apprenticeship pathway for those who wish to do so. The investigation should focus on the access for apprentices to both higher level VET and higher education qualifications. It has the potential benefit of attracting a wider cohort to apprenticeship pathways including young people who may not have otherwise considered this approach.

Expanding the Labour Market for Apprenticeships

The future of apprenticeships training in the context of the changing Australian labour market needs to be addressed. A different approach implemented overseas is the introduction of “higher apprenticeships” in the United Kingdom. This approach has the twin benefit of increasing the level of qualification awarded for apprenticeships as well as extending the scope to non-trade and more para-professional occupations. In the UK the higher apprenticeship framework covers qualifications from level 4 to 6 and includes a wide range of occupations, over 47, not usually associated with apprenticeships including: accounting; advertising and marketing communications; banking; care leadership and management; construction management; facilities management; information security; legal services; life sciences; power engineering; and supply chain management to name a few.³⁷

The experience to date in the UK suggests that this approach may only appeal to a particular range of companies, especially large, vertically integrated organisations. Nevertheless, this initiative was prompted by the same issues that face Australia and the approach warrants further investigation as to whether it fits within an Australian context.

Implement Competency Based Progression and Completion

A number of measures are required to deliver a high quality Australian apprenticeship system. Central to these is competency based progression and completion for apprentices which is an important flexibility mechanism available to employers. Employers can potentially gain skilled people in shorter periods of time. This is also a motivation for apprentices to complete their training earlier. A national roll-out of competency based progression across engineering and the construction trades needs to be supported. A number of successful strategies, as well as barriers to implementation, have been considered through projects such as Ai Group’s Australian Government-funded Engineering Excellence project.³⁸ This comprehensive report recommended the development of mechanisms to support the implementation of this initiative as well as a communication strategy with states and territories to facilitate the expansion of the initiative. RTOs will need to embrace significant professional development to assist the implementation of this core strategy.

³⁷ *Employer Guide to Higher Apprenticeships*, National Apprenticeship Services, 2014.

³⁸ *Engineering Excellence Report*, Australian Industry Group, November 2015.

National Consistency and Complexity

A national body would greatly assist the implementation of these measures including overseeing national consistency and ensuring programs and arrangements meet current and future workforce needs. The last major report on apprenticeships called for a ‘national custodian’ of apprenticeships to greatly improve outcomes. The purpose was to:

“oversee reform that will ensure Australia has a high quality Australian Apprenticeships system that:

- *responds to the needs of the economy*
- *supports nationally consistent standards for employment and training of apprentices and trainees*
- *focuses on retention and completion of apprentices and trainees*
- *supports high quality skill development to ensure all apprentices and trainees have well rounded and highly respected skills required by the economy.”³⁹*

A national body would be accountable for policy that underpins the system including both the education and employment functions. It would address the absence of a regular forum for employer bodies, unions or governments to progress a strategic vision for future Australian Apprenticeship system arrangements. This process needs to be established through COAG and be part of the forthcoming negotiations for the 2017 Commonwealth & State Partnership Agreements.

It is interesting to note that in the United Kingdom, admittedly a country with a unitary government, the decision has been taken to establish an Institute for Apprenticeships by April 2017. This will be an independent employer-led body tasked with the responsibility for regulating the quality of apprenticeships in the context of significant expected increases in participation (3 million commencements by 2020).⁴⁰

An Australian national body could take on the work commenced through COAG to harmonise the differences in qualifications across state borders. While some progress has been made there is still a significant volume of work to undertake. A national body would expedite this work.

In addition to national consistency much more needs to be done to reduce the complexity and confusion of the system. There is a need to remove duplication and the complex administrative and regulatory processes that have created barriers to movement of apprentices and trainees both within and across jurisdictional borders. Quite apart from the lack of national consistency these cause, there is increased administrative complexity for national employers and providers.

In this context the introduction of the proposed Australian Apprenticeships Management System will assist through the use of online services to reduce the current manual and paper-based processes. The system will be used to support the Australian Apprenticeships Support Network providers.

³⁹ *A shared responsibility: apprenticeships for the 21st century*, Final Report of the Expert Panel, Commonwealth of Australia, 2011, page 14.

⁴⁰ *English Apprenticeships: Our 2020 Vision*, Executive Summary, Department for Business Innovation and Skills and the Department for Education, 2015.

Participation in Apprenticeship Pathways

There is a need for more reliable data about participation in pre-apprenticeships. This would be assisted by the adoption of a nationally consistent definition of these arrangements. Even so, it is clear that there are benefits to be derived from participation in pre-apprenticeships. For this reason attempts to remove or reduce Certificates I and II should be resisted. They are needed as general preparatory programs in the secondary school system context. These programs including pre-apprenticeships provide entry-level training options for secondary students and job seekers.

The 2015 Review of Training Packages and Accredited Courses raised the prospect of developing new preparatory qualifications.⁴¹ These could have the advantage of providing a more general introduction to a broad industry area and would be particularly suitable for VET in Schools students and those interested in pre-apprenticeships. However, any potential implementation of this concept would require considerable care given the different entry-level points across different industries. It would not be possible to replace all Certificate I and II qualifications. In some industry areas the Certificate II is the entry level to employment. Some examples of entry-level occupations that are supported by Certificate II qualifications are trade assistant, process worker, machine operator, warehouse operator, data entry, customer service representative, desktop publisher, farm hand and horticultural worker. Pre-apprenticeship programs at Certificate I and II could play a significant role in this context and contribute to increased participation in Australian Apprenticeships.

Funding support has been sporadic and there is currently no specific Commonwealth allocation. Consideration needs to be given to clarifying the definition of pre-apprenticeships and providing support to enable them to lead to an expansion of participation in Australian Apprenticeships.

The other major pathway for young people is via the School-based Apprenticeships arrangements. This program has never had significant levels of participation except for Queensland and further support is required. The utilisation of group training arrangements would assist both of these pathways as the model reduces employer administration and can share the load through different company rotations. In the context of the need to lift participation of young people in Australian Apprenticeships an expanded use of School-Based Apprenticeships should be a key focus.

⁴¹ *Review of Training Packages and Accredited Courses*, Department of Education and Training, 2015.

