



**National Australian  
Apprenticeship Association**

## Renewing the apprenticeship construct and creating new trade pathways

TECHNICAL PAPER

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## A trifecta of challenges

If you live in a house or apartment, drive a car, use public transport, access the NBN, use electricity, rely on products that depend on extractive industries, have a relative in Aged Care or using the NDIS, want solar panels for your roof or are reassured by the deep clean of the school your children go to, you are the beneficiary of some of the skills the 4.5 million Australians have gained through the apprenticeship and traineeship system this century.

But the system is currently facing three major challenges. Front of mind is the existential threat posed by the Covid 19 pandemic and the recession it has brought. This has seen a 22% reduction in commencements this year exacerbating a medium-term decline in numbers. Apprentices and trainees accounted for 2.5% of the workforce in the first decade of the century but are less than 1.9% today.

The second is a longer-term trend that has seen the diminution of the value proposition for employers to be engaged in apprenticeships combined with policy settings that weaken the engagement of people seeking this pathway.

Our research shows that taking into account an employers' supervisory and coaching role it costs around the same to train a trade apprentice as an undergraduate. However, there are marked differences in the way we view and fund the arrangements.

A newly qualified bachelor's degree graduate arrives at their first employer fully qualified but inexperienced at zero cost to their employer.

By comparison, employers of apprentices must dedicate around \$27,000 in supervisory time over the apprenticeship to coach, supervise and train their apprentice on the job for which they receive no direct recompence.<sup>1</sup>

The third is a growing sense that the apprenticeship construct was designed for young people (primarily boys) making the school to work transition rather than the acquisition of skills across a working lifetime. Both the VET Reform Roadmap and the NSW Productivity Commission have challenged the sector to explore alternative ways to develop and recognise trade skills. Essentially to develop non-apprenticeship trade pathways.

This paper explores new constructs for apprenticeships that better reflects the role employers play, better integrates and updates the model of integrated work-based learning, and better supports the apprentice or trainee with a contemporary employment experience that builds the skills they need. It also examines where non-apprenticeship trade pathways could work best.

The aim is to draw more employers back into the system, expand apprenticeship and job

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1. Plus meet all the other employment and training costs, and bear the production and non-completion risks

opportunities and improve completion rates by reducing the issues apprentices encounter that lead them to quit their apprenticeship or traineeship job.

The apprenticeship system endures despite various policy misfires because it delivers the skills employers need, in the way they want the jobs performed, keeping abreast of changing technology and workflows. But the trifecta of challenges faced by the system place it at a critical juncture. It can either be refreshed and grow or face a long term decline.

We currently use the language of skill shortages to build the case for investment to patch the system up. But actually, what is needed is a mindset of smooth supply of future focused skills. It's the interruptions and disruptions to the smooth supply of work-based learning that create skill deficiencies in the economy.

It's vital for the recovery from the pandemic and the longer-term adaptive capacity of the Australian workforce that the construct for apprenticeships are renewed and alternative trade pathways explored.

## NAAA research insights

The Association has been collecting data on the impact of the Covid 19 pandemic on the apprenticeship market. We have formed a Covid 19 Steering group that collects weekly data from the front-end system that all Apprenticeship Network Providers use. This is provided to the Commonwealth each week.

We have also conducted a survey of 30,611 employers of apprentices to gauge utilisation of the JobKeeper allowance and to anticipate the effects once it is wound back.

A second smaller survey of employers that used to participate in the apprenticeship system but don't currently do so. This has also informed the key insights we have gleaned about the operation of the apprenticeship market and how it can be more effectively constructed to improve commencement and completion rates.

The value propositions for employers to participate in the apprenticeship system have been significantly eroded over the last decade. Currently only around 116,300 employers participate in the system.

An improved value proposition needs to be constructed to lift employer participation to around 152,650 businesses if apprenticeships and traineeships are to return to the historical rate of 2.5% of the workforce.<sup>2</sup>

Covid 19 has reduced commencements by 22% to the end of August. 154,000 (of the 255,000 apprentices in-training at the end of August) are currently on Jobkeeper support payments. This is 2.48 times the average workforce utilisation rate.

Our employer survey indicates that the winding back of JobKeeper payments could see up to 24,000 cancellations in April 2021, over and above normal exits and completions.

This means that without additional measures to support apprentice commencements in-training levels will drop to 205,000 by June 2021. Their lowest level since traineeships were introduced last century.

One consequence of the pandemic and ensuing recession is that current apprentices are less likely to separate voluntarily from their employer. Apprentice initiated cancellations seem to account for about half of all exits in normal periods.<sup>3</sup>

This is because the wage discount to undertake an apprenticeship job is high. A first-year hairdresser for example earns 63% of the National Minimum Wage. Switching to any other entry level role provides them with a 37% pay rise.

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2. At the same average number of 2.36 apprentices per employer as now. Currently apprentices are 1.9% of the workforce.

3. The same transitory effect was observed during the Global Financial Crisis, it may persist longer during the Covid recession.

Apprentices accept that low wages are part of the deal. But this rapidly breaks down if their on-the-job training and work environment do not meet the terms of their Training Contract. Apprenticeships only work when all sides abide by the deal set out in the Training Contract.

Over the last decade the engagement level of apprentices and trainees has fallen as a consequence of a weaker overall value proposition. Allowances have been replaced with loans, school leaving age has risen often delaying the start and therefore completion of an apprenticeship. Higher education opportunities have been more easily accessed, despite not always suiting the kinesthetic learning style of much of this cohort.<sup>4</sup>

Policy measures to improve the value propositions for employers and their apprentices have often counteracted each other. Higher wages under Modern Awards reduced the number of employers willing to employ an apprentice. Employers needing to meet higher RTO enrolment fees had the same effect.

Effective policy measures are those which account for both employers return on investment needs and apprentices engagement factors. These are measures such as the Additional Identified Skills Shortage program that provides double the incentive level for employers and a progress and completion incentive for apprentices.

Another successful measure has been the refinement of the Australian Apprenticeship Support Network (AASN) to include the “targeted services” of Gateway (matching) services and In-Training Support (mentoring) services. They have eased the recruitment burden for employers and provided additional mentoring to address work environment and on the job training issues.

Whilst employers do not employ apprentices because of the modest apprenticeship incentive (it’s a far more complex decision-making process than that), it does represent around 20% of their anticipated return on investment. So, if it is removed as some are recommending, it will reduce the value proposition to participate in the apprenticeship system still further.

Our estimate is that employers are required to contribute around \$27,000 of staff time to adequately discharge their supervision and on the job training role. There is currently no payment for this service.

Taking the employers’ supervision requirements and the apprentices’ wage discount into account a 4-year apprenticeship costs about the same as a cluster 4 band 3 qualification under the new “Jobready Graduates” Higher Education funding model. That is around \$38,300 in employer staff time and apprentice minimum wages foregone.

At the same time apprentices are expected to be productive members of staff, our model shows how their productivity rises over time and delivers maximum return in the final 18 months of the arrangement.

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4. Non-completion rates for students with an ATAR below 75 are double those with ATARs above that level.

One policy which had significant adverse and unintended consequences was to unilaterally shorten the term of the apprenticeship to 3 years once an apprentice had completed their “formal” training. This fundamentally misunderstands the value proposition for trade-based employers that the 4th year is the “pay back” year. Many employers exited the system after this decision in the jurisdictions that implemented it.

A fundamental realignment of the apprenticeship construct should be developed around a fresh look at the value propositions for involvement. It should concentrate on integrating the supervisory and coaching role of the employers into the formal learning delivery. As a consequence, the work environment for apprentices and the acquisition of their skills will be improved. This will enhance the overall deal for both parties.

The Association proposes that the new apprenticeship construct should focus on increasing commencements by drawing more employers back into the system through improved recognition and support of their role. In addition, completions can be increased by improving the on the job training and work environment of apprentices because it will lead to higher engagement and a fairer execution of the Training Contract.

Larger employers that offer a contemporary and supportive work environment and pay above Award payments achieve the highest completion rates. The powerful combination of both aspects should be the template for the new construct.

The predictive analytics tools that ANPs are using in Contract 7 have shown that 6% of apprentices that have recently commenced have no intention of completing their qualification and 34% are “wobbly” and in need of additional support. As Covid has continued the wobbly cohort has grown to more than 50% of current apprentices and trainees.

The effectiveness of these predictive and prescriptive analytics tools would be enhanced if they could be deployed in schools as part of the Gateway service, before a student chooses an apprenticeship pathway – not only after they have commenced.

The payment of JobKeeper allowances through the ATO is proof of concept that a more streamlined payment system for apprentice employers can be facilitated. The ability to triangulate supervision support payments with one touch payroll data would be a major step forward to identify employers who were not meeting Award obligations.





## A value creation model for how apprenticeships really work

The Association has developed an Apprenticeship Value Creation model to exemplify the components employers evaluate when they are considering employing an apprentice as well as those factors which achieve apprentice engagement. This provides insights for how commencement and completion rates can be improved.

The model demonstrates how the various factors interact and change over the duration of a 4-year trade apprenticeship. It can also be used for shorter duration Traineeship qualifications.

## Employer value propositions

The value proposition can be simply described as this:

A profitable apprenticeship (P) equals the revenue generated by the apprentice (R) minus the sum of the wages and on-costs (W), supervision costs (SC), tuition costs (TC), production risks (PR) and completion risks (CR).

In mathematical terms it can be expressed as follows:

$$P = \sum_{i=1}^n (R_i - (W_i + SC_i + TC_i + PR_i + CR_i))$$

In Plain English what this means is that when an employer is considering whether to put an apprentice or trainee on, they either formally or informally consider the following factors:

- The work they would like the apprentice or trainee to do
- The revenue this will generate, both in terms of billable or productive hours and financial incentives they may be eligible for
- The wages and oncosts required to employ the apprentice

- The resources required to supervise them appropriately
- Productive time “lost” when the apprentice attends formal training and how much the course enrolment fees (paid by the employer) will be
- Any production risks caused by interruptions or breakages
- The risk that the apprentice or trainee will leave before completing their Training Contract

The success of the apprenticeship construct for each business is likely to be affected by the:

- relative complexity of the entry level role
- speed for the apprentice or trainee to “pay their own way”
- opportunity cost of providing the additional workplace supervision
- sophistication of the employer’s recruitment, on boarding and HR practice
- employer’s recent experience and success employing apprentice and trainees
- ability to access the “right” formal training

## Apprentice value proposition and engagement

The model also assigns an apprentice engagement ratio. This is based on the value proposition that engagement (E) is determined by the level of wages earned (W) minus the sum of the wage discount (WD), tuition costs (TC), training experience (TE) and work environment (WE).<sup>5</sup>

$$E = \sum_{i=1}^n (WE_i - (WD_i + TC_i + TE_i + WE_i))$$

In Plain English what this means is that apprentices and trainees consider the following factors both before starting and during their apprenticeship:

- How much they will earn now
- How much they may earn after they complete their apprenticeship
- How much less current earnings are than the minimum wage or payment for other readily available work
- The costs to attend their formal training

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5. This draws on the Fair Deal – Apprentices and their employers in NSW report, BVET, 2010

- Satisfaction with their on and off-the-job training
- Satisfaction with their work environment - whether they have a good boss and supportive work mates.

The success of the Training Contract for apprentices and trainees is likely to be affected by their:

- Understanding of the vocation
- Intrinsic commitment to completing the Training Contract
- Prior experience
- Defined support structure
- Aptitude, physical ability and enjoyment of the vocation
- Ability to complete the formal study

This model is an aggregation of all industries that employ trade apprentices, whereas in reality each industry will have slightly different drivers, be experiencing different economic conditions and have differing access to potential apprentice candidates.

It also provides insight into how apprentice engagement levels change as wages rise, work autonomy increases, and formal training is completed.<sup>6</sup>

Combining both elements, the model is both illustrative at national level and can also be used at an industry level by entering the current industry assumptions that apply for the period to be modelled.

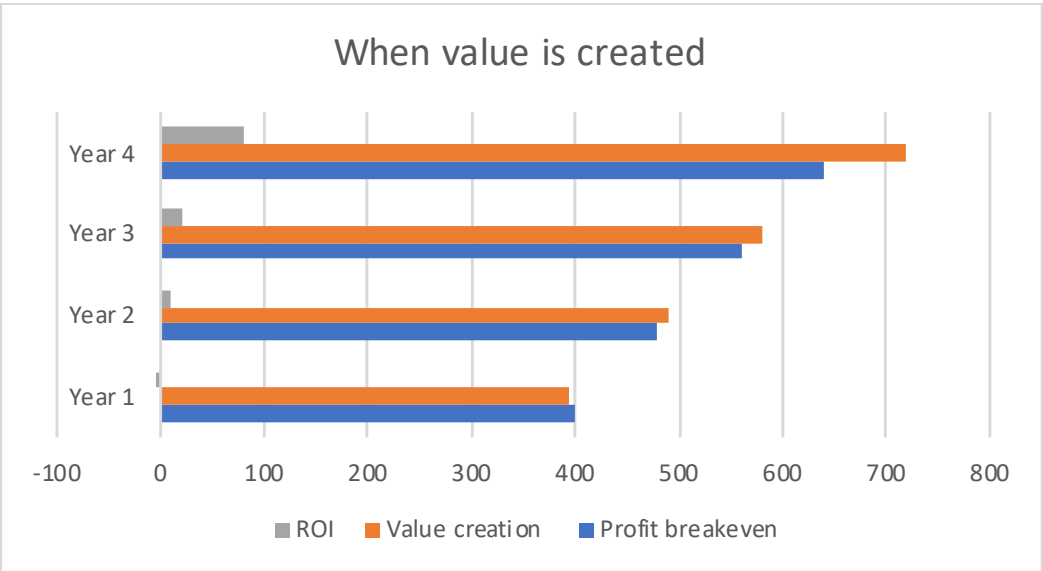
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6. A detailed explanation of the model with supporting mathematical calculations can be provided on request



# Most employers require a commercial return on the apprenticeship

The model illustrates when value is created in the apprenticeship arrangement. Here is an example of a base case for a carpentry apprentice.



Over the life of this apprenticeship an employer would pay the carpentry apprentice approximately \$188k in wages, allowances and on-costs. In return they would expect to generate \$290k in billable hours or productive work in order to achieve a return on investment of 7% per annum by the time the apprentice graduates.

The table below shows how the model plays out in dollar terms across the life of the apprenticeship.

The wages and on-costs are set by Award arrangements, the supervision costs are estimated from the Training Contract requirements and the tuition costs are known.

The model assigns a dollar value to the production risks and completion risks equal to about 22% of the costs in the first year falling to just 2% of costs in the fourth year. This reflects the reality that around 60% of apprentices who are going to drop out, do so in the first 12 months. It's also the first year when apprentice inexperience can result in the greatest likelihood of negative production impacts.

Over each of the four years the breakeven point shifts upward as wages increase.



	Year 1	Year 2	Year 3	Year 4
Revenue generated				
Apprentice generated hours billed or work sold	50,000	60,000	80,000	100,000
Contribution to billable hours or revenue generated by the team	20,000	20,000	14,000	
Employer incentives in this period	1,500	0	0	2,500
	71500	80000	94000	102500
Wages and On-costs				
Indicative Ordinary time earnings	28,500	33,000	37,500	44,200
Overtime		2,500	3,500	6,000
Superannuation	2,800	3,500	4,100	5,000
Allowances	1664	1664	1664	1664
Holiday Leave Loading	1,000	1,200	1,500	1,800
Workers compensation	1,000	1,200	1,500	1,800
Supervision costs				
Tradesperson hours to supervise apprentice in line with Training Contract	10,000	7,000	3,000	0
Opportunity cost of Tradesperson completing other billable work	3,000	1,000	0	0
Time liaising with support agencies	300	200	200	200
Complex payroll processing	500	500	500	500
Tuition costs				
Time 'lost' for attendance at RTO for formal training	5700	6600	7500	0
Enrolment fees	1,000	1,000	1,000	0
Any rotation to fulfill Training Contract requirements			1,000	1,000
Production risks				
Potential damage to equipment during familiarisation	1,000	500	0	0
Time spent rectifying apprentice work	1,000	500	0	0
Work observation - the period before an apprentice can attempt new processes	4,000	1,000	500	0
Non compliance with safety requirements - refamiliarisation	500	500	300	200
Other costs of rework from "substandard" performance	1,000	500	200	0
Completion risk				
Time and resources invested in recruitment process	2,000	0	0	0
Not suitable -risk of non completion during probationary period	2,000	0	0	0
Apprentice initiated separation	2,000	3,000	1,500	500
Performance managed exit	2,000	2,000	1,000	500
Interruption to work continuity - Team downtime	500	500	500	500
	71464	67864	66964	63864
breakeven point relative to year 1	1.0	1.2	1.4	1.6

Many employers cite altruistic reasons for participating in the apprenticeship system. But if we are to grow the numbers of employers that participate in the system, we need to ensure that the construct is one that is financially viable too.

This model is illustrative of the complex interplay of factors that determine financial viability.







## An apprenticeship is first and foremost a job

A prevailing view amongst many economists is that apprenticeships are primarily a training program that incorporates workplace learning, where the wider community benefit must also be weighed against the private benefit for the student. But for apprentices and their employers the arrangement is first and foremost a job. If an apprentice drops out it's usually because they are leaving the job. They don't like the wages, they don't like the work practices of their colleagues, they don't enjoy the work, or they don't feel supported enough.

A Fair Deal – Apprentices and their employers in NSW report is a seminal investigation of these factors. It highlights how apprentices get the concept of a job where they learn skills as they go. They are initially prepared to put up with a significant wage discount as long as they are supervised correctly, in a safe and supportive work environment, paid accurately and on time, allowed to attend their formal off-the-job training and become more autonomous as their skills and experience grow. In short, they value the things guaranteed in their Training Contract.

Here is an example of how a carpentry apprentice's engagement levels build over time.

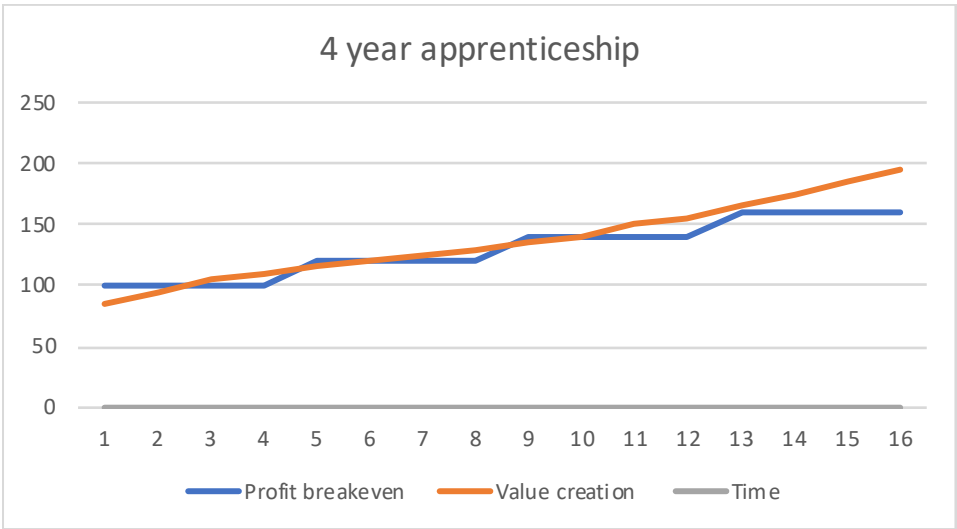
	Year 1	Year 2	Year 3	Year 4
Wages and loans				
Ordinary time earnings	28,500	33,000	37,500	44,200
overtime		3,300	3,700	4,500
Allowances	1664	1664	1664	1664
Superannuation	3016	3796	4286	5036
Youth allowance top up				
Trade support loan	8,617	6463	4,308	2,154
	30164	37964	42864	50364
Wage discount				
Percentage of National Minimum Wage	73%	84%	96%	113%
Opportunity cost - other entry level work	10,710	6,224	1,739	
Tuition costs				
Travel costs to attend RTO	1,080	1,080	1,080	0
Course material costs	500	500	500	0
Accommodation costs for "block release" training	1,000	1,000	1,000	
Training experience				
Supported to learn on the job	5,000	4,000	3,000	2,000
Time off work to study	2,000	2,000	2,000	0
Provided with help to overcome any study issues	5,000	3,000	3,000	0
Distance from RTO	1,000	1,000	1,000	
Satisfaction with RTO training	3,500	2,000	2,000	0
Work environment				
Paid accurately and on time	5,000	5,000	5,000	5,000
Good supervisor / boss	5,000	5,000	5,000	0
responsibilities grow as skills acquired	5,000	5,000	5,000	
Not bullied	5,000	5,000	2,500	
Safe work environment	5,000	5,000	5,000	5,000
Enjoy the work and have aptitude for it	5,000	5,000	5,000	10,000
	59790	50804	42819	22000
Apprentice engagement	0.50	0.75	1.00	2.29

The model assigns known amounts for wages and loans (where taken), the discount on the federal minimum wage (what could be earned in any other entry level job), and indicative tuition costs.

The model also assigns a dollar value to the other factors that go to the training experience and work environment. These will vary in each circumstance, but the total quantum remains largely similar. We know this because the engagement levels largely reflect the likelihood of dropping out in any given year of a carpentry apprenticeship used in the base case.

If something goes wrong with the training experience or in the work environment in the first year the apprentice has a high chance of not making it through. Whilst by the 4th year they are more than four times as likely to see the apprenticeship through. This is both because a 4th year is closer to the end but also because the risk factors are much diminished, and the pay levels have finally exceeded the federal minimum wage.

When everything goes well here is how an employer might expect an apprentice's productivity to increase over the life of the apprenticeship (orange line) mapped against the rising breakeven levels an employer must achieve as wages rise each year. Its striking that most of the return is achieved in final 18 months of the apprenticeship.



A key insight of this modelling is that both the employer and apprentice value propositions must be in balance for the apprenticeship arrangement to deliver a return for both.

So, for example if Award wages rise significantly that improves the value proposition and engagement for an apprentice but shifts the breakeven point higher for the employer. This results in higher productivity expectations by the employer if they are to achieve their modest 7% return on investment. Overall the arrangement is not improved by the wage rise.

Similarly, if Award wages do not keep pace with National Minimum Wage increases the wage discount may become too great and an apprentice will leave if work becomes problematic. In these circumstances an employer has lost the time they invested in recruiting, arranging and meeting the upfront tuition costs. So low wages can be a false economy.

For example, a first year Hairdressing apprentice earns just 63% of the national minimum wage, so if they choose to switch to any other entry-level job they earn 37% more.



## Success factors

The Association has worked with Ai Group to identify a matrix of success factors that apply to both the workplace learning context and the candidate attributes of prospective apprentices.

The model is instructive both for employers and candidates but also for the nature of supports that the apprenticeship system provides and how these can be best targeted.

By assigning a simple rating scale we can determine if the workplace learning context has high, medium or low support needs

Similarly, the characteristics of the candidate can be assigned high medium or low support needs.

This is instructive for the targeting of Australian Apprenticeship Support Network (AASN) services as this matrix demonstrates.

		AASN		
Employers	Low	Reward and recognition, standard Universal service	Gateway service to ensure good match	Gateway and In-Training support
	Medium	Employer support to address complexity or risk factors	Gateway and In- Training support	Pre-apprenticeship for candidate, Gateway and In-Training
	High	Employer support to address complexity or risk factors	Pre-apprenticeship for candidate, Gateway for employer	Discussion with STA about whether to proceed
		Low	Medium	High
		Candidates		

## Workplace learning success factors

Workplace learning context	1	2	3
<b>Relative complexity of entry level roles</b>	Only induction required before autonomous	Some up front training before autonomous	Substantial knowledge before autonomous
<b>Speed for apprentice/ trainee to pay their own way</b>	Can bill them out immediately	Productive at 6 months	Income generating after 1 -2 years
<b>Opportunity cost of workplace supervision</b>	Can “buddy up” minimal downside impact	Some dedicated time required by supervisor	Designated supervision / coaching role
<b>Employer recruitment, onboarding and HR practice</b>	Sophisticated and formalised HR practice, positive workplace culture	Position description, interview, informal induction, engaged workplace culture	Informal and referral based, no induction, low staff engagement
<b>Employer experience training apprentices and trainees - how many they employ now</b>	Long experience / good completion rates	Some experience / standard completion rates	Little experience / no completion track record
<b>The ability to access the “right” training</b>	Standard training is suitable and locally available	Customised training is required and available in the region	Specialised or niche training is required - limited availability

### Rating scale

Low support needs	6 to 9
Medium support needs	10 to 13
High support needs	14 to 18

## Candidate success factors

Candidate characteristics	1	2	3
<b>Understanding the vocation</b>	Full understanding of what is involved	Some understanding of what is involved	Low understanding of what is involved
<b>Commitment to completing the Training Contract</b>	Have always wanted to do this vocation and will see it through	Would like to try this vocation and reasonably confident will complete	Not sure if this is the right choice and may not complete - wobbly
<b>Prior experience</b>	Have worked in the vocation before / recommencing	Have done work experience or vocational placement before	Have no prior experience
<b>Defined support structures</b>	Have a supportive family/ partner / support network	Can access support from family / partner and friends if required	Doing this on my own / not supported by family / partner / friends
<b>Aptitude, physical ability for and enjoyment of the vocation</b>	Prior experience demonstrates aptitude and enjoyment, physical ability	Prior work experience highlights potential aptitude and enjoyment	Unsure if they will enjoy or have an aptitude for the vocation
<b>Ability to complete formal study</b>	Good written, numeric and verbal communication skills. Year 12 graduate with sound results	Potential literacy, numeracy or language issues. Requires formal assessment	Identified literacy, numeracy or language issues. Requires assistance

## The role of the workplace supervisor is key

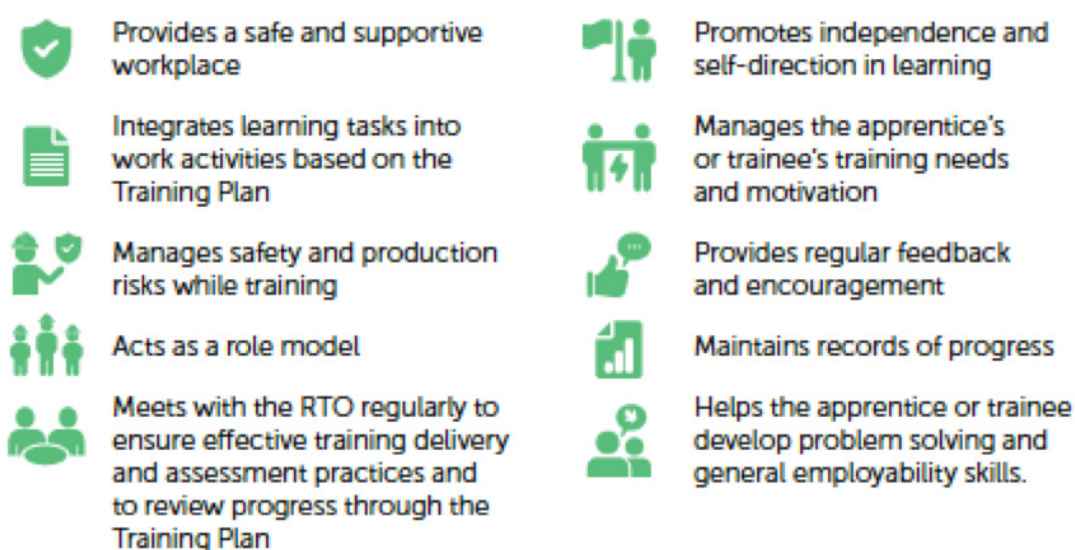
Here is how NSW Training Services describes the role of the workplace supervisor

*“...the minimum requirement under an apprenticeship or traineeship is that a person who can demonstrate the competencies relevant to the vocation the apprentice/trainee is employed in will supervise the apprentice/trainee in the workplace. For apprentices, this will usually be a person who is a qualified tradesperson in that trade.*

*The employer must ensure that each apprentice/trainee has the necessary support and an appropriate level and quality of supervision on the job. The level of supervision provided should be aimed at facilitating the successful achievement of the relevant competencies for each individual apprentice/trainee. It should be reassessed on a regular basis by taking into account the stage the apprenticeship/traineeship is at and the experience and training the apprentice/trainee has received in a particular task.”*

The supervisors expected functions are set out in a 41-page handbook<sup>7</sup> which contains the following diagrammatic representations of the role:

### An effective workplace supervisor:



The advice in the booklet is excellent.

The fee paid to employers for this service is zero. Lower apprentice wages help offset the tuition, production and completion risks, but they do not offset the considerable costs of supervision.

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7. Supervising your apprentice or trainee – A guide for workplace supervisors. Oct 2018 NSW Govt

The Association's modelling indicates that it costs an employer an average of \$26,900 to provide these supervision services. About 10% of the total cost of the apprenticeship arrangement over four years.

This is roughly double what the Registered Training Organisation is paid to undertake the formal training.

It means in reality that it costs about the same to teach an apprentice over four years as it does an under-graduate degree in Higher Education. The difference being that the training costs are fully reimbursed in the Higher Education arrangement but primarily borne by employers in the apprenticeship training system.

In apprenticeships employers must assume the risk of employment, supervision, external tuition costs, production and non-completion risks. The value proposition is complex and onerous.

By comparison if an employer hires a degree qualified graduate, they have borne none of the risks, had to fund none of the formal training or integrated work-based learning. If they participated in providing a "practical" placement they can use this as a recruitment tool. There is a fundamental comparability and fairness issue to be addressed here.



## Getting the balance right

Since the Fair Deal research was undertaken in 2010 there has been a marked reduction in apprenticeship in-training levels.

The major reduction was associated with the removal of existing worker traineeship incentives - demonstrating the price sensitivity of employers to changes in incentive levels.

Between 2000 and 2015 trade apprenticeships and new entrant traineeships averaged 2.5% of the workforce. That level is now 1.9% and falling rapidly with the impact of Covid 19 on commencement levels.

When thinking about why, prior to Covid 19, we were 50,000 apprentices and trainees below historical levels its useful to examine the range of policy decisions that have impacted either directly or indirectly on the apprenticeship market and see how they affected value propositions.

Policy changes since 2010	Employer impact	Apprentice impact	Observations
Modern Award pay increases	↓	↑	Fewer places created by employers
Shorter nominal duration	↓	↑	Employer "pay back year" removed
Increase enrolment fees	↓	→	Increased cost to employers
Uncapped University places with lower ATAR	↓	→	Fewer candidates, lower HE completions
RTO funding below volume of learning minimum	←	↓	Lower formal training contact models
Rise in school leaving age	↓	↓	Reduced school certificate level cohort
Australian Apprenticeships Wage Subsidy pilot	↑	→	High value to employers
Replace Tools for your Trade allowance with Trade Support Loan	←	↓	Need to take a loan for the "privilege" of doing a job
Expansion of targeted service in AASN contract	↑	↑	Candidates, employers and apprentices benefit
Additional Identified Skills Shortage program	↑	↑	Both employers and apprentices benefit

In the last decade only the Additional identified Skills Shortage program and the expansion of Targeted Services in the AASN contract have improved the value proposition for both employers and their apprentices.

All other initiatives had at best mixed impacts. Mainly though, the value propositions for employers to be involved in apprenticeships has been reduced with many employers exiting the system.

So, by June 2020 there were only 116,322 active employers of apprentices, with on average 2.36 apprentices in-training and commencing a further 1.3 apprentices on average per year.

## Why might alternative trade pathways be required?

The NSW Productivity Commission's 2020 Green Paper outlines the case for alternative pathways:

*“Largely for historical reasons, apprenticeships are designed around the needs of teenage boys. The training model has not adapted to a rapidly changing world, locking many people out of the trades, especially HSC graduates, women and older people. As a result, many miss out on the jobs they are best suited for, while skills shortages persist.*

*Key reasons why apprenticeships are insufficient to meet the needs of our modern economy include the uncompetitive pay, inflexible training delivery, and the long time needed to complete. Apprenticeships, however, will remain well-suited to certain cohorts and should remain in place. But we need new pathways to trades to complement apprenticeships to broaden access to the trades.”*

## What might they look like?

The NSW Productivity Commission suggests:

*“These new pathways would remove the requirement to be employed in the industry prior to enrolment in training but would continue to require the same competency standards, gained through experience. This could be obtained in a variety of ways including a mix of prior experience, unpaid work, simulated work and paid employment outside an apprenticeship contract—for instance, as an unskilled worker. Allowing younger aspiring tradespeople to gain on-the-job experience may require regulatory changes under the Apprenticeship and Traineeship Act 2001 (NSW).*

*This is because of the restrictions in place preventing workers below 21 years of age from being employed in trades unless they are an apprentice or already qualified. New pathways would dispense with all time-based requirements. Qualifications should depend on competency, not time served. A learner with experience in an industry—or a related industry—should be able to have their existing competencies recognised enabling them to qualify for a trade much faster.*

*HSC holders are considerably more mature and better educated than year-10 school leavers, especially if they have already completed a school-based VET qualification. Similarly, a mature and experienced worker is more likely to demonstrate competency in less time than a teenager.*

*Regardless of the pathway into a trade, current high standards of competency, workmanship and safety should be upheld. All qualified and licensed workers should have their skills assessed in a rigorous and comprehensive way. Assessment should focus on the endpoint, rather than the pathway.”*

### Draft recommendation 3.2: Build more pathways to the trades

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Introduce two new and more flexible pathways to trades qualifications: one for HSC-holders (two years or less) and one for mature-aged workers (18 months or less).

- Incentivise registered training organisations to develop more flexible modes of course delivery, including after-hours learning and short intensive periods of full-time study.
- Establish a Training and Skills Recognition Centre to implement the new training pathways, starting in the construction sector.
- Regulate to allow employment of unqualified juniors (those below 21 years of age) in a recognised trade vocation outside an apprenticeship, provided they have completed, or are enrolled in the relevant trades qualification.
- Endorse a marketing campaign to raise the profile and awareness of the new trades pathways.

In broad terms alternative pathways could be designed for the following types of people:

- Young people (under 21) interested in a Trade but who cannot secure an apprenticeship job upfront - perhaps because of the Covid recession. These people would take a **program led pathway** of institutional based learning securing the work experience they need after completing their qualification.
- **Adult new entrants** (over 21) who have secured a job that will provide them with the relevant experience but who cannot afford to live on adult apprentice wages. These people would fund the enrolment fees in their training and study at night or at weekends.
- **Existing workers** in a job that will provide them with the relevant experience who want to upskill to a full trade qualification. This could include people who partially completed an apprenticeship in the past but are not in a position to fall back to apprentice wages. Again, they would fund their own enrolment costs, study in their own time and perhaps resume with an RPL or credit transfer process.

Also, there are currently around 13,000 Existing Worker apprenticeship commencements annually where the apprentice is maintained at their prior wage, but where the employer funds the enrolment fees and enables the apprentice to study in “work time”. These apprentices are prime candidates for competency-based progression given their previous work experience.

One area for further focus would be to expand this pathway under existing arrangements by providing the RTO and the employer with additional financial support to do so.

The types of employers that may be attracted to alternative trade pathways could fall into three broad categories:




















- Large employers that face persistent skills shortage constraints and have a business imperative to solve the skills shortages
- Medium sized employers, perhaps subcontractors on major projects that have a business imperative to fast track trade skills acquisition
- Small businesses with specialist requirements and a high enough profit margin to forgo government incentives and pay full Award wages whilst their staff develop the skills they need.

One way to assess how this changes the value propositions outlined earlier is to examine the factors that would build the business case for the alternative pathway.
























## Who would alternative trade pathways suit?

For individuals this might suit those who:

Will suit you if	Adult new entrant	Existing worker upskilling	Program led - interim tradesperson
Have been in the workforce for several years			
Have an existing qualification that is similar / part completion			
Have always wanted to do the vocation but couldn't get a start			
Needs a full time Award wage			
Can study at night or on weekends			
Are prepared to pay own enrolment fees / course costs			
Are prepared to accept financial risk of non-completion			
Have an existing relationship with your employer			
Your employer is supportive of you studying			
Your employer will help you get the experience you need			

For businesses it would suit if:

Will suit your business if it	Large, sophisticated, skills shortage constrained	Medium, project driven, accelerated trades	Small, specialist, high margin
Can afford to pay full adult Award wages whilst the employee learns			
Can provide the diversity of work to cover vocation			
Has the capability to coach the employee			
Has the capability to plan and track the things they have learned			
Has an HR function to analyse the required tasks, position functions			
Does not require financial assistance from government			
Has a production imperative to fast track a skilled workforce			
Confident you have good attachment with the employee			

These pathways seem best suited to Existing Workers and Adult New Entrants in large and medium sized businesses with a strong commercial imperative to fast track skills and directly address skills shortages.

The program led pathway is a riskier proposition because the young person could commit to 2 years of study but then not secure a work placement at the end to build up their experience and demonstrate competence to an employer's satisfaction.

In the UK the program led approach was abandoned because conversion rates for graduates moving into trades using this pathway was as low as 28%. Largely because the young person was required to secure their own job at the end, had little experience but had to be paid a full adult wage.

This might be offset to some degree if they were assisted through the Australian Apprenticeship Support Network to secure a work placement and Industrial Awards were changed to recognise their “interim tradesperson” status.

Additional measures that could be considered to address structural barriers include:

- Recognising employers that pay above award apprentice wages
- Recognising employers that proactively recruit female tradespeople
- Fast track the redevelopment of TYIMS around a new data model that “joins up” the support structures between workplace supervisors, RTOs, Apprenticeship Network Providers and the State Training Authorities
- Explore how the ATO payment mechanisms (used for JobKeeper and Job Maker Hiring Credits) could be deployed to support employers of apprentices and triangulated with one touch payroll records to ensure apprentices are paid accurately and on time.
- Replace existing skills shortage dependent incentives with a supervision allowance paid monthly in arrears through the ATO.
- Pay RTOs an additional “fast track” fee to schedule training in a way that supports competency-based progression where both the apprentice and their employer request it.
- Provide first time supervisors of apprentices and trainees with a training program in how to undertake their supervisory responsibilities effectively.

These measures would encourage more employers to participate in the apprenticeship system by improving the value propositions for involvement. They would also increase completion rates by addressing factors that erode the engagement of apprentices.

## Recommendations for system reform

1. Re-price the apprenticeship training arrangement in a way that recognises the on-the job training and supervisory responsibilities of the employer. Be clear about the volume of learning provided by the RTO and the amount provided by the workplace. Allocate resources accordingly.
2. Provide a supervision allowance to employers paid through the ATO using the same mechanism as JobMaker hiring credits. Pay the allowance monthly in arrears and triangulate it with the one touch payroll data.
3. The supervision allowance should cover the employers' direct costs and be set at \$13,800 in the first year, \$9,000 in the second year and \$4,100 in the third year.<sup>8</sup>
4. After piloting the supervision allowance and refining the arrangement replace all skills shortage dependent incentive arrangements with the new support. Differential rates could apply for regional and remote areas or where an employer hires an apprentice from a disadvantaged group. Standard incentives should be retained for lower priority occupations.
5. Update the data model for apprenticeships to ensure that all stakeholders are informed in real time about changes to the employment and training status of the apprentice. Have this as a priority in the design of the new Apprenticeship Data Management System (ADMS).
6. Formally recognise employers that have a high average completion rate as “apprentice champions”. Create new national awards that celebrate their achievements.
7. Use apprentice champions to pilot a system of “completion enhancing” above award payments to apprentices equal to 85% of the National Minimum Wage for first years, 95% for second years and 105% for third years. The discounts reflect the time spent in off the job training.
8. Through agreement with the States and Territories implement a single national Training Contract and Training Plan that supports the implementation of the supervision allowance. Integrate the integrated work-based learning model.
9. Pay Registered Training Organisations an additional loading where they support employers to fast track their apprentices using competency-based progression arrangements.
10. Extend AASN contract 7 arrangements by 2.5 years to June 30th, 2024 to provide stability of arrangements during the Covid 19 recession. Include an updated service mix in the contract extension.

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8. Fourth year apprentices are largely assumed to be able to work independently and less likely to require additional supervision over standard HR arrangements.

11. Realign the services in the Australian Apprenticeship Support Network to have a greater emphasis on Targeted Services once the AAIP has been simplified through the supervision allowance. Support the expansion of predictive and prescriptive analytics tools for the Gateway service in schools through the AASN contract as a priority.
12. The new AASN service mix should include advice about how to comply with Award obligations. Non-compliance is a major reason why apprentices drop out. The enhanced service could integrate Fair Work Ombudsman tools in the provision of In-Training Support (ITS). ITS could also build out other supports and tools for workplace supervisors including a training program for first time supervisors of apprentices and trainees.
13. Pilot Existing Worker and Adult New Entrant alternative trade pathways in jurisdictions that support them. Extend the JobTrainer arrangements so that the enrolment fees are waived. Pilot them with large and medium sized employers in the construction industry.